Check List the journal of biodiversity data

ANNOTATED LIST OF SPECIES

Check List 17 (1): 289–310
https://doi.org/10.15560/17.1.289

PENSOFT

Preliminary survey of avifauna of the Estação Ecológica do Cuniã in Porto Velho, northern Brazil

Tatiana Lemos da Silva Machado[1*], Uéslei Marques de Oliveira[2], Sheiliane Santos do Nascimento[3], Marcos Pérsio Dantas Santos[4], Angelo Gilberto Manzatto[5]

1 Programa de Pós-Graduação em Biodiversidade e Biotecnologia, Rede BIONORTE, Universidade Federal de Rondônia, Porto Velho, RO, Brazil • tatianalemoss@gmail.com https://orcid.org/0000-0001-5059-1775

2 Centro Universitário São Lucas, Porto Velho, RO, Brazil • uesleimarques@hotmail.com https://orcid.org/0000-0002-8020-8279

3 Programa de Pós-Graduação em Desenvolvimento Regional e Meio Ambiente, Universidade Federal de Rondônia, Porto Velho, RO, Brazil • sheilianenascimento27@gmail.com

4 Universidade Federal do Pará, Instituto de Ciências Biólogicas, Belém, PA, Brazil • persio.marcos@gmail.com https://orcid.org/0000-0001-8819-867X

5 Laboratório de Biogeoquímica Ambiental, Nucleo de Ciência e Tecnologia, Universidade Federal de Rondônia, Porto Velho, RO, Brazil • manzatto@unir.br https://orcid.org/0000-0002-6414-8966

* Corresponding author

Abstract

We present a preliminary list of the avifauna found at the Estação Ecológica do Cuniã (ESEC Cuniã) in Porto Velho, northern Rondônia, Brazil. This inventory is based on systematic records obtained by mist-netting and camera trapping and non-systematic visual and audio records collected within the study area in 2017 and 2019. The combined dataset includes 135 bird species representing 37 families. Among these species are endemic birds and migratory birds. Four of the species are described in the last decade, and the records represent expansions of these species' known ranges to the state of Rondônia. Overall, the data show that the ESEC Cuniã has a considerable diversity of bird species and is important for the conservation of the fauna of the floodplains of the Amazon basin.

Keywords

Amazon floodplains, bird conservation, long-term ecological research, ornithological inventory, protected area

Academic editor: Caio J. Carlos | Received 13 January 2021 | Accepted 22 January 2021 | Published 24 February 2021

Citation: Machado TLS, Oliveira UM, Nascimento SS, Santos MPD, Manzatto AG (2021) Preliminary survey of avifauna of the Estação Ecológica do Cuniã in Porto Velho, northern Brazil. Check List 17 (1): 289–310. https://doi.org/10.15560/17.1.289

Introduction

Amazonia is the world's most diverse tropical forest and is located mostly (60%) in Brazil (Silva et al. 2005). Santos et al. (2011) identified the Brazilian state of Rondônia as one of the most environmentally complex regions of the Amazon basin, with an extremely diverse biota, representing one of the most important centers of endemism of South American birds (Cracraft 1985).

The bird fauna of Rondônia has been studied since 1829 (Pelzeln 1871). In the 1990s, Stotz et al. (1997) carried out an extensive inventory of birds, recording 459 species at a single location (Cachoeira Nazaré) on the Ji-Paraná River. More recent studies have focused on northeastern (Cohn-Haft et al. 2007; França et al. 2011; Guilherme et al. 2018), eastern (Santos et al. 2011; Costa

©The authors. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

et al. 2018), and southwestern Rondônia (Olmos et al. 2011; Sousa et al. 2019). However, few scientific data are available from the state's conservation units (Bóçon 1999; França et al. 2011; Olmos et al. 2011), and most fieldwork has been restricted to short-term studies conducted as part of the management plans for these areas. The bird fauna along the federal highway BR-319 is also poorly studied (Menger 2011).

The conversion of forest for cattle ranching to pasture, slash-and-burn farming, and the cash crops by agribusiness operations (Margulis 2003) has progressively fragmented the Amazonian landscape in recent decades. The modification of the environment through deforestation, habitat fragmentation, and burn-off results in the extinction of species, loss of genetic diversity and ecosystem services, as well as elimination of opportunities for the analysis of ecological phenomena (Marini and Garcia 2005). Protected areas are essential for the conservation of local biodiversity, the maintenance of regional climate patterns. the safeguarding the biota (Rylands and Pinto 1998; Pereira et al. 2013), and providing infrastructure for research of the organisms found within.

The Cuniã–Jacundá integrated management system was established in 2005 by the consolidation of a working relationship among the administrations of the Estação Ecológica do Cuniã (ESEC Cuniã), the Reserva Extrativista do Lago do Cuniã, and the Floresta Nacional de Jacundá, all located in the state of Rondônia. This initiative was proposed by the administrators of these protected areas as a strategy for the integration of management actions as well as the involvement of the different sectors of society in the management of the conservation units (PPBio 2005). This is an ecologically important action, given that the region is rich in floodplain lakes and swamps formed by the Madeira River and its tributaries, as well as breeding grounds and nurseries of the local bird fauna.

The majority of the protected areas in this mosaic are sustainable-use conservation units, in which the managed exploitation of natural resources is permitted, which is a problem. The lack of accurate surveys in the region during the creation of these protected areas and, in particular, the conflicts with local residents surrounding the conservation units are additional problems. The threat to biodiversity is further exacerbated by the ongoing advance of agricultural frontiers and the paving of highways within the interfluve. Thus, there is a need for the systematic inventory of the region's biodiversity. Herein, we compile a comprehensive list of the bird fauna of the ESEC Cuniã, which is located in the municipality of Porto Velho, the capital of the state of Rondônia. We also provide data on specific aspects of the biology and conservation of these bird species.

Methods

Study area. The Estação Ecológica do Cuniã (ESEC Cuniã; Cuniã Ecological Station in English) is located in the northern extremity of the Brazilian state of Rondônia, 80 km northeast of the city of Porto Velho (Fig. 1).

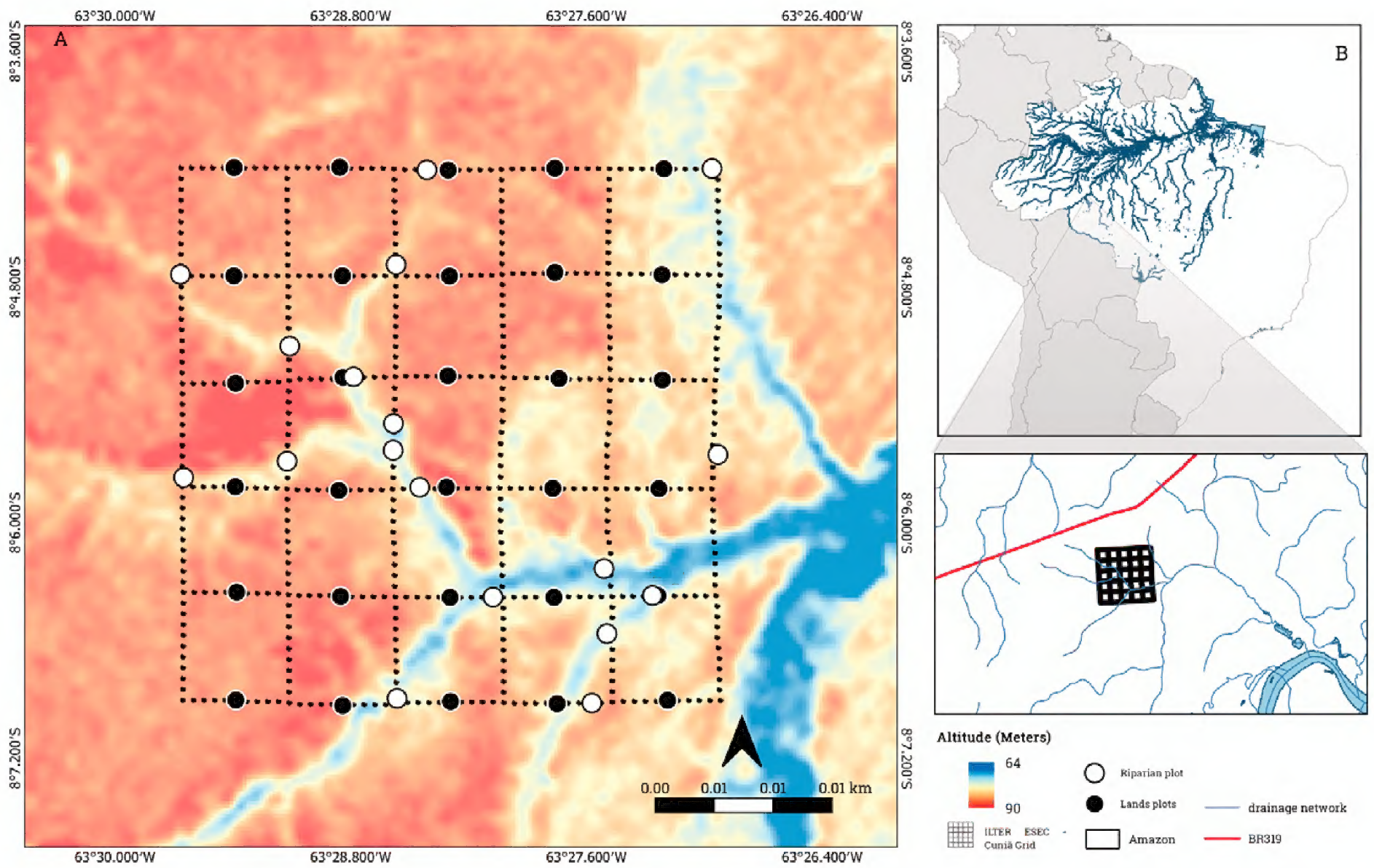

Figure 1. Location of the study area, showing the 5 km × 5 km sampling grid within the ESEC Cuniã in Porto Velho, Rondônia, Brasil. The black circles represent the terra firme (upland) plots and the white circles represent the location of the riparian plots, where bird sampling nets were installed.

This strict conservation unit, created by a federal decree on 27 September 2001, encompasses an area of transition between dense and open forest and areas of campinarana grassland (Pansini et al. 2016; Andrade et al. 2017). The climate is classified as Aw (tropical, winter dry season) in the Köppen classification system (Kottek et al. 2006).

The ESEC Cuniã is located on the floodplain of the Madeira River. The soils are dominated by hydromorphic laterite, which is found throughout most of the interfluve, with hydromorphic gley and alluvial eutrophic or alic soils on the fluvial terraces and plains (Quesada et al. 2011).

Data collection. We recorded systematic and non-systematic observations of birds in the ESEC Cuniã between 2017 and 2019. Visual and audio records of birds were collected non-systematically along 5 km of trails. Visual records were collected using Eagle 8 × 40 binoculars and a camera, and audio records were obtained using a Zoom H4n Pro 4-Track Audio Recorder. The photographic and audio records are deposited in the WikiAves free access online database (http://www.wikiaves.com.br).

The systematic study was based on data collected by mist-netting and camera trapping. Both procedures were conducted within the standard grid of 25 km^2 having 12 trails each with a length of 5 km, six running north–south and six east–west. Adjacent to the trails, 30 permanent *terra firme* plots (Table 1), each 250 m long and varying in width, were installed in a north–south orientation (Magnusson et al. 2005) together with 18 riparian plots (Table 1) following the margins of watercourses. The central line of these plots had 25 straight segments, 10 m in length, which were marked with numbered stakes (Bueno et al. 2014).

The mist-netting was conducted in 47 plots following the protocol of Bueno et al. (2014). The nets were installed in the central corridor to avoid contact with the sensitive zone of the plots, normally located on the left side of the central line of each plot. Ten mist-nets, each 10 m long, 2.5 m high, and with a 36 mm mesh, were installed in each plot, along the central line (250 m) of each plot, in alternating segments. The first net was installed in the first 10 m segment, the second net was installed in the third segment, and so on (Bueno et al. 2014).

Mist-netting was conducted during both the rainy and the dry seasons between January 2018 and January 2019. The nets were deployed at dawn, approximately 6:30 h, and remained open until 12:30 h. Each plot was sampled once per season, and the total sampling effort was 4,593 net-hours. The mist-nets were checked every 50 min and closed during heavy rain and cold weather. All the birds captured were banded with numbered metal rings provided by the Centro Nacional de Pesquisa e Conservação de Aves Silvestres of the Instituto Chico Mendes de Conservação da Biodiversidade–under authorization number 4175, coordinated by TLSM (senior bander, reg. no. 2347551).

The camera trapping campaign was conducted using Bushnell HD Nature View Essential Camera traps (12 MP, model 119739), which were installed in all 48 plots of the PPBio study grid in the ESEC Cuniã. Two expeditions to ESEC Cuniã were undertaken for the deployment of camera trapping, one in the dry season (July–October 2018) and the other in the wet season (January–March

Table 1. Plots surveyed for birds in the ESEC Cuniã, Rondônia, Brazil.

Plot	Type	Latitude	Longitude	Plot	Type	Latitude	Longitude
T01	Terra firme	08°04′11″S	063°29′24″W	T25	Terra firme	08°06′22″S	063°27′14″W
T02	Terra firme	08°04′11″S	063°28′51″W	T26	Terra firme	08°06′54.4″S	063°29′23″W
T03	Terra firme	08°04′12″S	063°28′18″W	T27	Terra firme	08°06′56″S	063°28′51″W
T04	Terra firme	08°04′11″S	063°27′46″W	T28	Terra firme	08°06′55″S	063°28′17″W
T05	Terra firme	08°04′11″S	063°27′12″W	T29	Terra firme	08°06′55″S	063°27′45″W
T06	Terra firme	08°04′45″S	063°29′23″W	T30	Terra firme	08°06′54″S	063°27′11″W
T07	Terra firme	08°04′44″S	063°28′51″W	R01	Riparian	08°04′12″S	063°28′25″W
T08	Terra firme	08°04′44″S	063°28′18″W	R02	Riparian	08°04′12″S	063°26′58″W
T09	Terra firme	08°04′43″S	063°27′46″W	R03	Riparian	08°05′15″S	063°28′47″W
T10	Terra firme	08°04′44″S	063°27′13″W	R04	Riparian	08°05′49″S	063°28′27″W
T11	Terra firme	08°05′17″S	063°29′23″W	R05	Riparian	08°06′23″S	063°28′05″W
T12	Terra firme	08°05′15″S	063°28′50″W	R06	Riparian	08°06′22″S	063°27′16″W
T13	Terra firme	08°05′15″S	063°28′18″W	R07	Riparian	08°06′54″S	063°28′34″W
T14	Terra firme	08°05′16″S	063°27′44″W	R08	Riparian	08°06′55″S	063°27′34″W
T15	Terra firme	08°05′16″S	063°27′13″W	R09	Riparian	08°4′44.1″S	063°29′40″W
T16	Terra firme	08°5′48.9″S	063°29′23″W	R10	Riparian	08°05′46″S	063°29′39″W
T17	Terra firme	08°05′50″S	063°28′52″W	R11	Riparian	08°05′06″S	063°29′07″W
T18	Terra firme	08°05′49″S	063°28′19″W	R12	Riparian	08°05′41″S	063°29′07″W
T19	Terra firme	08°05′49″S	063°27′46″W	R13	Riparian	08°04′41″S	063°28′34″W
T20	Terra firme	08°05′50″S	063°27′14″W	R14	Riparian	08°05′30″S	063°28′35″W
T21	Terra firme	08°06′21″S	063°29′23″W	R15	Riparian	08°05′38″S	063°28′35″W
T22	Terra firme	08°36′23″S	063°28′52″W	R16	Riparian	08°06′14″S	063°27′31″W
T23	Terra firme	08°06′23″S	063°28′18″W	R17	Riparian	08°06′34″S	063°27′30″W
T24	Terra firme	08°06′23″S	063°27′46″W	R18	Riparian	08°05′39″S	063°26′56″W

2019). Each expedition took approximately 60 days, with 10 camera traps being deployed in 10 different plots, where they remained for approximately 10–15 days. The traps were then redeployed in different plots until the whole trail grid had been covered.

Identifications. Birds were identified using ornithological guides appropriate for the study region (Ridgely and Tudor 1994; Sick 1997; Erize et al. 2006; Schulenberg et al. 2007; Begazo 2020), and the audio records were verified using the WikiAves (http://www.wikiaves.com.br/) and Xeno-canto (https://www.xeno-canto.org/) databases. Each species was classified according to its migratory behavior (Piacentini et al. 2015; Somenzari et al. 2018). The taxonomic sequence follows the recommendation of the Brazilian Committee for Ornithological Records (Piacentini et al. 2015).

Results

We recorded 135 species belonging to 37 families (Table 2). Of species, 108 were recorded by the quantitative mist-netting or camera trapping, and 27 species were recorded in the non-systematic sampling by observation or photography. Overall, 85 species are passeriforms, and 50 belong to other orders (Table 1). The species most frequently captured in the mist-nets were *Phaethornis philippii* (Bourcier, 1847) (n = 152 individuals), followed by *Oneillornis salvini* (Berlepsch, 1901) (n = 84 individuals), and *Willisornis poecilionotus* (Cabanis, 1847) (n = 79 individuals).

The most diverse family was Thamnophilidae, with 28 (20%) species, followed Dendrocolaptidae, with 13 (9.4%) species. Two of the species recorded in the ESEC Cuniã, *Tinamus guttatus* Pelzeln, 1863 (Fig. 2C)

Table 2. Bird species recorded in the Cuniã Ecological Station (ESEC-Cuniã) in Rondônia, Brazil between 2010 and 2019. Status: E = endemic to the Inambari interfluve, R = residents, NM = Nearctic migrants, PR = partially migratory. Type of record: 1 = in mist-net, 2 = in camera trap; 3 = observation or audio recording. Sex: M = male, F = female, I = indeterminate. For coordinates of localities see Table 1. Voucher: WA = WikiAves; CEMAVE = banded. * = Near Threatened.

Family, species	English name	Status	Record type	Sex	Locality	Voucher
Tinamidae						
Tinamus guttatus Pelzeln, 1863*	White-throated Tinamou	R	2	I	R04, R07, R09, T20, T22, T24, T27, T28	WA4047676
Crypturellus cinereus (Gmelin, 1789)	Cinereous Tinamou	R	2	I	T13, T30, R07, R17	WA4047666
Crypturellus strigulosus (Temminck, 1815)	Brazilian Tinamou	R	2	I	T15	WA4047645
Cracidae						
Penelope jacquacu Spix, 1825	Spix's Guan	R	2	I	Trail of the study grid (08°04′12″S, 063°28′24″W)	WA4047687
Pauxi tuberosa (Spix, 1825)	Razor-billed Curassow	R	2	I	T25, R05	WA4047642
Ardeidae						
Cochlearius cochlearius (Linnaeus, 1766)	Boat-billed Heron	R	2	I	T11	WA4047680
Accipitridae						
Harpagus bidentatus (Latham, 1790)	Double-toothed Kite	R	3	I	T07	WA3817977
Psophiidae						
Psophia leucoptera Spix, 1825	Pale-winged Trumpeter	R	2	I	T08, T05	WA4047679
Columbidae						
Patagioenas plumbea (Vieillot, 1818)	Plumbeous Pigeon	R	3	I	T13	WA3841361
Leptotila verreauxi Bonaparte, 1855	White-tipped Dove	R	2	I	T30	WA4047646
Leptotila rufaxilla (Richard & Bernard, 1792)	Gray-fronted Dove	R	1	F	R18	CEMAVE-J49770
Geotrygon montana (Linnaeus, 1758)	Ruddy Quail-Dove	R	1, 2	M F	T01, T03, T24, R06	CEMAVE-J12162
Cuculidae						
Piaya melanogaster (Vieillot, 1817)	Black-bellied Cuckoo	R	3	I	L4 (08°4′11″S, 063°28′47″W)	WA3826287
Coccyzus melacoryphus Vieillot, 1817	Dark-billed Cuckoo	R	3	I	Camp (08°06′53″S, 063°28′33″W)	WA3091346
Coccyzus americanus (Linnaeus, 1758)	Yellow-billed Cuckoo	NM	3	I	L4 (08°04′49″S, 063°28′46″W)	WA3826894
Strigidae						
Glaucidium hardyi Vielliard, 1990	Amazonian Pygmy-Owl	R	3	I	L4 (08°5′49″S, 063°27′13″W)	WA4045902
Trochilidae						
Threnetes leucurus (Linnaeus, 1766)	Pale-tailed Barbthroat	R	1	I	T29, R02, R10, R16, R18	CEMAVE-A56515
Phaethornis ruber (Linnaeus, 1758)	Reddish Hermit	R	1	I	T05, T30, R11, R16	CEMAVE-A56521
Phaethornis philippii (Bourcier, 1847)	Needle-billed Hermit	R	1	I	T01, T02, T04, T05, T07, T08, T09, T10, T12, T15, T17, T18, T19, T20, T22, T23, T24, T25, T27, T28, T29, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R15, R16, R17, R18	CEMAVE-A54901
Campylopterus largipennis (Boddaert, 1783)	Gray-breasted Sabrewing	R	1	I	T12, T29, R11	CEMAVE-A56526
Anthracothorax nigricollis (Vieillot, 1817)	Black-throated Mango	R	3	F	R11	WA3826898
Topaza pella (Linnaeus, 1758)	Crimson Topaz	R	1	F	T15	CEMAVE-A56507
Thalurania furcata (Gmelin, 1788)	Fork-tailed Woodnymph	R	1	M F	T10, T18, T25, T29, R03, R05, R09, R07, R10, R11, R16	CEMAVE-A54902
Trogonidae						
Trogon viridis Linnaeus, 1766	Green-backed Trogon	R	3	F	R17	WA3838905
Trogon curucui Linnaeus, 1766	Blue-crowned Trogon	R	3	I	L4 (08°04′11″S, 063°28′47″W)	WA4017877

Family, species	English name	Status	Record type	Sex	Locality	Voucher
Trogon rufus Gmelin, 1788	Black-throated Trogon	R	3	F	Camp (08°06'53"S, 063°28'33"W)	WA3826283
Alcedinidae						
Chloroceryle aenea (Pallas, 1764)	American Pygmy Kingfisher	R	1	M F	T24, T25, R04, R07, R08, R09, R10, R15, R18	CEMAVE-D85536
Chloroceryle inda (Linnaeus, 1766)	Green-and-rufous Kingfisher	R	1	M F	T25, T29, R05, R09	CEMAVE-H75610
Momotidae						
Electron platyrhynchum (Leadbeater, 1829)	Broad-billed Motmot	R	1	I	T06, R08, R09, R12	WA3091368; CEMAVE-H75622
Galbulidae						
Galbula cyanicollis Cassin, 1851	Blue-cheeked Jacamar	R	1	M F	T15, T29, R01, R02, R15	WA3829204; CEMAVE-D85553
Galbula ruficauda Cuvier, 1816	Rufous-tailed Jacamar	R	1	M	T24	CEMAVE-F59512
Galbula dea (Linnaeus, 1758)	Paradise Jacamar	R	3	I	R07	WA3822213
Bucconidae						
Bucco macrodactylus (Spix, 1824)	Chestnut-capped Puffbird	R	1	I	R15	CEMAVE-H75624
Bucco tamatia Gmelin, 1788	Spotted Puffbird	R	1	I	R05	CEMAVE-H89414
Nystalus obamai Whitney, Piacentini, Schunck, Aleixo, Sousa, Silveira & Rêgo, 2013	Western Striolated-Puffbird	R	3	I	trail L3 (08°05'15"S, 063°28'50"W)	WA3841845
Malacoptila rufa (Spix, 1824)	Rufous-necked Puffbird	R	1	I	T02, T09, T12, T19, T21, T27	CEMAVE-H89413
Monasa morphoeus (Hahn & Küster, 1823)	White-fronted Nunbird	R	1	I	T24, T25, R10	CEMAVE-J49763
Capitonidae						
Capito niger (Statius Müller, 1776)	Black-spotted Barbet	R	3	I	L3 (08°06'22"S, 063°27'14"W)	WA3826289
Ramphastidae						
Ramphastos tucanus cuvieri Linnaeus, 1758	White-throated Toucan	R	3	I	T03	WA3826331
Selenidera reinwardtii langsdorffii (Wagler, 1827)	Golden-collared Toucanet	R	1	M	T07, R07	CEMAVE-J20939
Pteroglossus mariae Gould, 1854	Araca Brown-mandibled Aracari	R	1	I	T13	CEMAVE-N8043
Pteroglossus beauharnaisii Wagler, 1831	Curl-crested Aracari	R	1	I	T10	CEMAVE-R36667
Picidae						
Veniliornis affinis (Swainson, 1821)	Red-stained Woodpecker	R	1	I	T04	CEMAVE-F45105
Piculus flavigula (Boddaert, 1783)	Yellow-throated Woodpecker	R	3	I	T21	WA3091283
Campephilus rubricollis (Boddaert, 1783)	Red-necked Woodpecker	R	3	I	L3 (08°05'17"S, 063°29'23.2"W)	WA3826330
Psittacidae						
Pyrrhura lucianii (Deville, 1851)	Bonaparte's Parakeet	R	3	I	Trail L4 (08°04'49"S, 063°28'46"W)	WA3839025
Pionus menstruus (Linnaeus, 1766)	Blue-headed Parrot	R	3	I	L3 (08°5'17"S, 063°29'23"W)	WA3826899
Amazona farinosa (Boddaert, 1783) *	Mealy Parrot	R	3	I	L3 (08°5'17"S, 063°29'23"W)	WA3829206
Thamnophilidae						
Pygiptila stellaris (Spix, 1825)	Spot-winged Antshrike	R	1	M F	T17, R15	CEMAVE-E12750
Neoctantes niger (Pelzeln, 1859)	Black Bushbird	R	1	F	T24	CEMAVE-F59547
Epinecrophylla haematonota (Sclater, 1857)	Napo Stipple-throated Antwren	R	1	M F	T02, T10, T12, T15, T17, T19, T20, T21, T22, T23, T27, T29, T30, R01, R06, R10	CEMAVE-C70603
Myrmotherula axillaris (Vieillot, 1817)	White-flanked Antwren	R	1	M F	T01, T02, T05, T06,T07,T08,T09,T10,T13, T15, T17, T21, T22, T28, T29, R03, R05, R06, R07, R12	CEMAVE-C13573
Myrmotherula longipennis Pelzeln, 1868	Long-winged Antwren	R	1	M	R07, R08	CEMAVE-C92120
Myrmotherula assimilis Pelzeln, 1868	Leaden Antwren	R	1	I	R08	CEMAVE-C92122
Thamnomanes saturninus (Pelzeln, 1868)	Saturnine Antshrike	R	1	F	T11	CEMAVE-E164106
Thamnomanes caesius (Temminck, 1820)	Cinereous Antshrike	R	1	M F	T05, T23, T24, R08, R11	CEMAVE-D77121
Thamnophilus schistaceus d'Orbigny, 1835	Plain-winged Antshrike	R	3	I	Trail L4 (08°04'49"S, 063°28'46"W)	WA4017900
Thamnophilus murinus Sclater & Salvin, 1868	Mouse-colored Antshrike	R	1	M F	T02, T08, T15, T19, T20, T21, T26, T28, T29, R10, R17	CEMAVE-D77109
Thamnophilus aethiops Sclater, 1858	White-shouldered Antshrike	R	1	M F	T04, T05, T06, T08, T10, T12, T21, T23, T27, T30, R06	CEMAVE-F45107
Cymbilaimus lineatus (Leach, 1814)	Fasciated Antshrike	R	1	M	T29, R18	CEMAVE-G90688
Frederickena unduliger (Pelzeln, 1868)	Undulated Antshrike	R	1	F	T03	CEMAVE-J54998
Hypocnemoides maculicauda (Pelzeln, 1868)	Band-tailed Antbird	R	1	M F	T25, R06, R11, R15, R17	CEMAVE-D85579
Hylophylax naevius (Gmelin, 1789)	Spot-backed Antbird	R	1	M F	T25, R11, R14, R15	CEMAVE D85549
Myrmelastes hyperythrus (Sclater, 1855)	Plumbeous Antbird	R	1	F	R18	CEMAVE-H75617
Myrmelastes humaythae (Hellmayr, 1907)	Humaita Antbird	R	1	M F	R02, R01	CEMAVE-G131516
Myrmelastes leucostigma (Pelzeln, 1868)	Spot-winged Antbird	R	1	M	T29, R05, R07,	CEMAVE-E78330
Myrmoborus myotherinus (Spix, 1825)	Black-faced Antbird	R	1, 2	M F	T02, T12, T15, T17, T27, T30, R07, R09	CEMAVE-D77143
Akletos goeldii (Snethlage, 1908)	Goeldi's Antbird	R	1	M	N2	CEMAVE-H89406
Hafferia fortis (Sclater & Salvin, 1868)	Sooty Antbird	R	1	M F	T05, T12, R03, R16	CEMAVE-G94818
Cercomacroides nigrescens (Cabanis & Heine, 1859)	Blackish Antbird	R	1	M F	T05, T06, T15, R12, R18	CEMAVE-D8558
Cercomacroides serva (Sclater, 1858)	Black Antbird	R	1	M	T06	CEMAVE-D77130

Family, species	English name	Status	Record type	Sex	Locality	Voucher
Hypocnemis peruviana Taczanowski, 1884	Peruvian Warbling-Antbird	R	1	M F	T10, T11, T15, T18, T19, T24, T25, T27, T29, T30 R02, R03, R06, R08, R09, R10, R11, R12, R14, R15, R16, R18	CEMAVE-D77101
Willisornis poecilinotus (Cabanis, 1847)	Common Scale-backed Antbird	R	1	M F	T02, T05, T07, T10, T12, T15,T16, T17, T18, T19, T23, T24, T30, R01, R03, R04, R05, R06, R07, R09, R10, R12, R14, R16, R18	CEMAVE-D77119
Phlegopsis erythroptera (Gould, 1855)	Reddish-winged Bare-eye	R	1	F	T29	CEMAVE-G131386
Oneillornis salvini (Berlepsch, 1901)	White-throated Antbird	R	1	MF	T03,T05, T12, T15, T19, T20, T23, T24, T27, T29 T30, R01, R02, R04, R05, R06, R07, R08, R10, R11, R15, R16, R17, R18	CEMAVE-H89408
Rhegmatorhina melanosticta (Sclater & Salvin, 1880)	Hairy-crested Antbird	R	1	F	T03, T05, T10, T11, T18, T20 T23, R08, R10, R12	CEMAVE-H75607
Formicariidae						
Formicarius colma Boddaert, 1783	Rufous-capped Antthrush	R	1, 2	I	T15, T20 T24, R03, R05, R06, R07, R09	CEMAVE-G94827
Scleruridae						
Sclerurus macconnelli Chubb, 1919	Tawny-throated Leaftosser	R	1	I	T10, T20, T27, R07, R18	CEMAVE-D150847
Sclerurus caudacutus (Vieillot, 1816)	Black-tailed Leaftosser	R	1	I	T05, T20	CEMAVE-G131373
Dendrocolaptidae						
Dendrocincla fuliginosa (Vieillot, 1818)	Plain-brown Woodcreeper	R	1	I	T09, T11, T12, T17, T23, T29, R02, R03, R04, R05 R16, R18	CEMAVE-G94836
Dendrocincla merula (Lichtenstein, 1829)	White-chinned Woodcreeper	R	1	I	T04, T07, T08, T09, T10, T11, T12, T13, T14, T15, T16, T20, T25, T29, T30, R04, R06, R07, R10, R11, R12, R17	CEMAVE-E127522
Deconychura longicauda (Pelzeln, 1868)	Long-tailed Woodcreeper	R	1	I	T21, T27, R04	CEMAVE-F45135
Certhiasomus stictolaemus (Pelzeln, 1868)	Spot-throated Woodcreeper	R	1	I	T01, T05, T07, T08, T09, T10, T12, T13, T14, T15, T17, T19, T20, T21, T22, T23, T24, T25, T28, R04, R08, R17	CEMAVE-77117
Glyphorynchus spirurus (Vieillot, 1819)	Wedge-billed Woodcreeper	R	1	I	T02, T05, T10, T11, T16, T18, T22, T24, T25, R01, R02, R04, R05, R06, R07, R08, R09, R10, R11, R15, R16, R18	CEMAVE-D77103
Xiphorhynchus ocellatus (Spix, 1824)	Ocellated Woodcreeper	R	1	I	T24, T25, T27, R02, R04, R05, R07, R08, R15, R16, R17	CEMAVE-G90625
Xiphorhynchus elegans (Pelzeln, 1868)	Elegant Woodcreeper	R	1	I	T02, T04, T05, T07, T08, T10, T11, T12, T13, T15, T16, T17, T19, T21, T23, T24, T27, T28, T29, T30, R01, R02, R03, R04, R06, R16, R17, R18	CEMAVE-E173427
Xiphorhynchus guttatoides (Lafresnaye, 1850)	Lafresnaye's Woodcreeper	R	1	I	R02, R15, R16	CEMAVE-J49756
Campylorhamphus gyldenstolpei Aleixo, Portes, Whittaker, Weckstein, Gonzaga, Zimmer, Ribas & Bates, 2013	Tupana Scythebill	R	1	I	T18, T29, R03, R18	WA3091308; CE-MAVE -G94829
Dendroplex picus (Gmelin, 1788)	Straight-billed Woodcreeper	R	1	I	T25	CEMAVE-E173429
Lepidocolaptes fatimalimae Rodrigues, Aleixo, Whittaker & Naka, 2013	Inambari Woodcreeper	R	3	I	trail L5 (-8°6'21.2"S; -63°29'22.8"W)	WA381829
Dendrocolaptes juruanus Ihering, 1905	Juruá Woodcreeper	R	1	I	T10, T14, R02	CEMAVE-J49754; WA3314112
Hylexetastes stresemanni Snethlage, 1925	Bar-bellied Woodcreeper	R	1	I	T05, T07; T08	CEMAVE-J20938
Xenopidae						
Xenops minutus (Sparrman, 1788)	Plain Xenops	R	1	I	T16, T20, R02, R06, R12	CEMAVE-D77150
Furnariidae						
Ancistrops strigilatus (Spix, 1825)	Chestnut-winged Hookbill	R	1	I	T11, T24, R11	CEMAVE-E99084
Automolus subulatus (Spix, 1824)	Striped Woodhaunter	R	1	I	T12, T18, R04	CEMAVE-E164122
Automolus ochrolaemus (Tschudi, 1844)	Buff-throated Foliage-gleaner	R	1	I	T02, T04; T06, T15, T17, T23, T24, T25, T29, R01, R03, R04, R05, R06, R09, R10	CEMAVE-H75625
Automolus infuscatus (Sclater, 1856)	Olive-backed Foliage-gleaner	R	1	I	T07, T24, R04, R05, R06, R07, R09, R10	CEMAVE-G94845
Philydor erythrocercum (Pelzeln, 1859)	Rufous-rumped Foliage-gleaner	R	1	I	T10, T23, T22, T25, R01, R08	CEMAVE-F45115
Philydor erythropterum (Sclater, 1856)	Chestnut-winged Foliage-gleaner	R	1	I	T13, T20; T23, R01, R04, R09, R14, R16, R18	CEMAVE-D150825
Philydor pyrrhodes (Cabanis, 1848)	Cinnamon-rumped Foliage-gleaner	R	3	I	R07, R08	CEMAVE-E1734413
Synallaxis rutilans Temminck, 1823	Ruddy Spinetail	R	1	I	T17, T23	CEMAVE-E127524
Pipridae						
Ceratopipra rubrocapilla (Temminck, 1821)	Red-headed Manakin	R	1	M F	T04, T08, T11, T14, T15, T17, T19, T20, T21, T25, T30, R05, R09, R10, R11, R15, R16, R18	WA3005920; CEMAVE-C92140
Lepidothrix coronata caelestipileata (Spix, 1825)	Blue-crowned Manakin	R	1	M F	T02, T04, T05, T09, T10, T12, T14, T15, T16, T18, T19, T21, T22, T23, T24, T25, T27, T29, R01, R02, R03, R04, R06, R07, R08, R10, R11, R15, R16, R17, R18	CEMAVE-C43153; WA3285224
Manacus manacus (Linnaeus, 1766)	White-bearded Manakin	R	1	F	T10, R08, R09, R12, R18	CEMAVE-D150831
Heterocercus linteatus (Strickland, 1850)	Flame-crowned Manakin	R	1	M F	T24, T25, R06, R07, R09, R10, R11, R12, R14, R15, R18	CEMAVE-D85569
Chiroxiphia pareola regina (Linnaeus, 1766)	Blue-backed Manakin	R	1	M	R09, R18	CEMAVE-D150826
Onychorhynchidae						
Onychorhynchus coronatus (Statius Müller, 1776)	Royal Flycatcher	R	1	M F	T21, T22, T24, T29, R03, R04, R09, R10, R11, R17, R18	CEMAVE-D150834
Terenotriccus erythrurus (Cabanis, 1847)	Ruddy-tailed Flycatcher	R	1	I	T11, T15, T16, T19, R02	WA3826892; CEMAVE-C92045
Myiobius barbatus (Gmelin, 1789)	Whiskered Flycatcher	R	1	I	T25, R03, R04, R05, R06, R08 R11	CEMAVE-D85577

Family, species	English name	Status	Record type	Sex	Locality	Voucher
Tityridae						
Schiffornis turdina (Wied, 1831)	Thrush-like Schiffornis	R, E	1	I	T02, T03, T04,T05, T06, T07, T13, T14, T19, T23, T27, T28, T30, R01, R03, R04, R05, R07, R09, R17	CEMAVE-E164108
Laniocera hypopyrra (Vieillot, 1817)	Cinereous Mourner	R	1	I	T04, T18, T29, R02	CEMAVE-G90645
Cotingidae						
Lipaugus vociferans (Wied, 1820)	Screaming Piha	R	1	I	T16, R06, R08	CEMAVE-J49762
Xipholena punicea (Pallas, 1764)	Pompadour Cotinga	R	3	I	R07	WA3829214
Pipritidae						
Piprites chloris (Temminck, 1822)	Wing-barred Piprites	R	1	I	T12	CEMAVE-C92002
Rhynchocyclidae						
Cnipodectes subbrunneus (Sclater, 1860)	Brownish Twistwing	R	1	I	T06, T10, T21, T23, T24, T27, R04, R17	CEMAVE-E127557
Mionectes oleagineus (Lichtenstein, 1823)	Ochre-bellied Flycatcher	R	1	I	T03, T11, T15, T16, T18, T29, R05, R06, R07, R09, R10, R11, R17, R18	CEMAVE-D77124
Corythopis torquatus Tschudi, 1844	Ringed Antpipit	R	1	I	T16	CEMAVE-D77118
Rhynchocyclus olivaceus (Temminck, 1820)	Olivaceous Flatbill	R	1	I	R12	CEMAVE-E12753
Hemitriccus minor (Snethlage, 1907)	Snethlage's Tody-Tyrant	R	1	I	T02, T12, T15, T24, T25, T30, R01, R03, R09, R16, R18	CEMAVE-C73189
Hemitriccus minimus (Todd, 1925)	Zimmer's Tody-Tyrant	R	1	I	T07, T20, R02, R12, R15	CEMAVE-D85540
Tyrannidae						
Ramphotrigon ruficauda (Spix, 1825)	Rufous-tailed Flatbill	R	1	I	T17, R09	WA3829211, CEMAVE-D77142
Troglodytidae						
Microcerculus marginatus (Sclater, 1855)	Scaly-breasted Wren	R	1	M	R17	CEMAVE-F45150
Pheugopedius genibarbis (Swainson, 1838)	Moustached Wren	R	1	I	R14, R18	CEMAVE-D85545
Turdidae						
Turdus lawrencii Coues, 1880	Lawrence's Thrush	R	3	I	R05	WA3285125
Turdus sanchezorum O'Neill, Lane & Naka, 2011	Creamy-bellied Thrush	R	1	I	R18	CEMAVE-H89432
Turdus ignobilis Sclater, 1858	Black-billed Thrush	R	1	I	R18	CEMAVE-G90675
Turdus albicollis Vieillot, 1818	White-necked Thrush	R	1	I	T10	CEMAVE-G131365
Parulidae						
Myiothlypis fulvicauda (Spix, 1825)	Buff-rumped Warbler	R	1	I	T24, R04, R05, R06, R08, R11, R15, R16	CEMAVE-C70611
Mitrospingidae						
Lamprospiza melanoleuca (Vieillot, 1817)	Red-billed Pied Tanager	R	3	I	R07	WA3285247
Thraupidae						
Volatinia jacarina (Linnaeus, 1766)	Blue-black Grassquit	R	1	M	T01, T21	CEMAVE-D77115
Tersina viridis (Illiger, 1811)	Swallow Tanager	MPR	3	M	R07	WA4051327
Saltator maximus (Statius Müller, 1776)	Buff-throated Saltator	R	1	I	T24	CEMAVE-G131501
Cardinalidae						
Habia rubica (Vieillot, 1817)	Red-crowned Ant-Tanager	R	1	M F	T12, T15, R08, R10, R11	CEMAVE-E127525
Cyanoloxia rothschildii (Bartlett, 1890)	Rothschild's Blue Grosbeak	R	1	M F	T11, T20, T29, R02, R12, R14, R15, R16, R18	CEMAVE-H75611

and *Amazona farinosa* (Boddaert, 1783) (Fig. 2B), are classified as Near Threatened by the IUCN (2021). Four of the species (*Nystalus obamai* Whitney, Piacentini, Schunck, Aleixo, Sousa, Silveira & Rêgo, 2013; *Lepidocolaptes fatimalimae* Rodrigues, Aleixo, Whittaker & Naka, 2013; *Campylorhamphus gyldenstolpei* Aleixo, Portes, Whittaker, Weckstein, Gonzaga, Zimmer, Ribas & Bates, 2013; *Turdus sanchezorum* O'Neill, Lane & Naka, 2011) were described only in the last decade (Fig. 3).

Overall, 133 of the species recorded here are classified as residents (Piacentini et al. 2015). Based on the classification by Somenzari et al. (2018), two species use the ESEC Cuniã as a migratory stopover: *Tersina viridis* (Illiger, 1811) is classified as partially migratory, with some birds migratory and others resident, and *Coccyzus americanus* (Linnaeus, 1758) is classified as a Nearctic migrant, which migrates from the breeding grounds regularly every year.

Annotated list of species

Family Tinamidae

***Tinamus guttatus* Pelzeln, 1863**

Figure 4A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 8.IX.2018; camera trap photographs; plots R04, R07, R09, T20, T22, T24, T27, T28;WA404767.

Identification. This species is small (34 cm in length), with brown eyes and bill, gray head with a white throat, brownish upper parts with black stripes on the lower back, light-yellow spots on the upper coverts of the wings and tail, and brownish underparts. It inhabits low elevations in the tropical rainforest (Erize et al. 2006).

***Crypturellus cinereus* (Gmelin, 1789)**

Figure 4B

Figure 2. Some bird species recorded of the ESEC Cuniã. **A.** *Ramphastos tucanus cuvieri*. **B.** *Amazona farinosa*. **C.** *Coccyzus americanus*. **D.** *Tersina viridis*.

Figure 3. Some newly recorded bird species of the ESEC Cuniã: **A.** *Nystalus obamai*. **B.** *Campylorhamphus gyldenstolpei*. **C.** *Lepidocolaptes fatimalimae*. **D.** *Turdus sanchezorum*. A, B, D photographed by UMO, respectively; B photographed by TLSM.

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.VIII.2018; camera trap photographs; plots T13, T30, R07, R17; WA4047666.

Identification. This species is small (29 cm in length), with grayish-black plumage (Sick 1997); the cap is cinnamon-rufous, and the sides of the neck are streaked faintly with white (Erize et al. 2006).

***Crypturellus strigulosus* (Temminck, 1815)**

Figure 4C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 31.I.2019; camera trap photographs; plot T15; WA4047645.

Identification. This species is 28 cm long, brown with shades of gray on the neck and breast, and with a pale belly. The head and upper back are reddish-brown. The wings and lower back are barred with brown.

Family Cracidae

***Penelope jacquacu* (Spix, 1825)**

Figure 4D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; on the access trail of the study grid; 08°04′12″S, 063°28′24″W;first record on 10.III.2019; camera trap photograph; WA4047687.

Identification. The mean length of this species is 70 cm. The upper plumage is greenish dark brown, and the feathers of the head, neck, mantle and breast have whitish borders. The plumage of the tail is olivaceous brown.

***Pauxi tuberosa* (Spix, 1825)**

Figure 4E

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.VIII.2018; camera trap photographs; plots T25, R05; WA4047642.

Identification. The mean length of this species is 89 cm. The plumage of the body is black, and that of the tail has a whitish border. The beak is red, with a high culmen.

Family Ardeidae

***Cochlearius cochlearius* (Linnaeus, 1766)**

Figure 4F

Records. BRAZIL – **Rondônia** • Porto Velho, Esta Velho,

Estação Ecológica de Cuniã; first record on 23.II.2018; camera trap photographs; plot T11; WA4047680.

Identification. This species has a mean length of 50 cm. The crown is black, and the forehead, head, and breast white. The beak is flattened. The upper parts of the body are gray, and the lower parts are cinnamon in color.

Family Accipitridae

***Harpagus bidentatus* (Latham, 1790)**
Figure 4G

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 21.VII.2018; observation; plot T07; WA3817977.

Identification. This species is 32 cm in length. The head and upperparts are gray. The underparts area are rufous with a varying amount of pale barring. The throat is pale and with a median, black streak that is often noticeable.

Family Psophiidae

***Psophia leucoptera* (Spix, 1825)**
Figure 4H

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 2.II.2019; camera trap photographs; plots T08, T05; WA4047679.

Identification. This species is 50 cm in length. Its body plumage is dark with white wingtips which form a patch on the anterior body.

Family Columbidae

***Patagioenas plumbea* (Vieillot, 1818)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; 7.I.2019; sound record; plot T13; WA3841361.

Identification. This species is 31 cm long and mostly gray. The tail is solid gray. The iris is pale, and the bill is black.

***Leptotila verreauxi* (Bonaparte, 1855)**
Figure 4I

Records. BRAZIL • **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 7.I.2019; camera trap photographs; plot T30; WA4047646.

Identification. This species is 30 cm in length. Its plumage is brown with the breast lighter. The head is grayish, with metallic highlights on the nape and upper dorsum.

***Leptotila rufaxilla* (Richard & Bernard, 1792)**
Figure 4J

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 21.IX.2018; captured with mist-nets and banded; plot R18; CEMAVE-J49770.

Identification. This species is 26 cm in length. The back is grayish-brown and the bill is black. The forehead is whitish gray, with the sides of the head and neck ochraceous, and the underparts are brownish. The iris is brown, with red orbital skin.

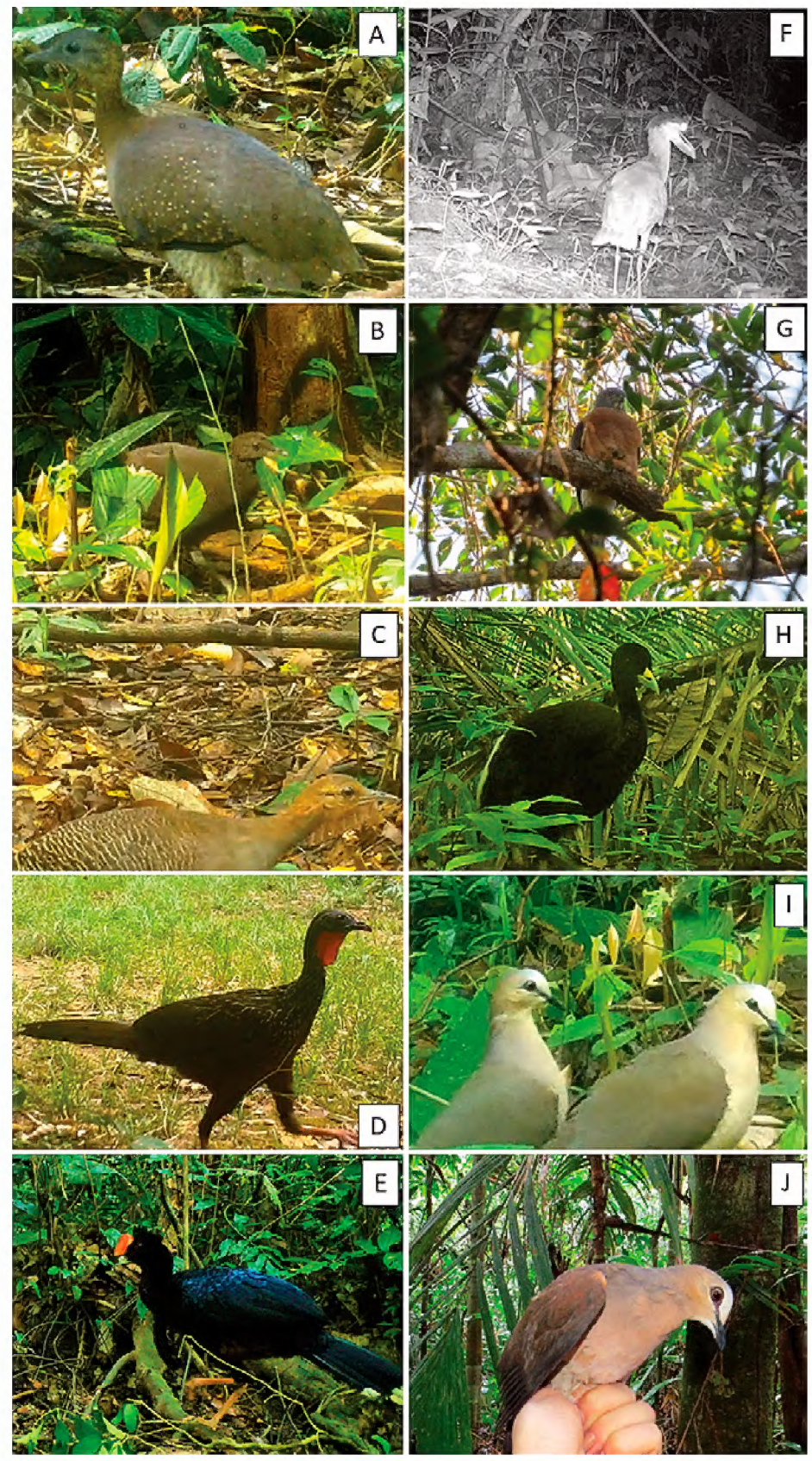

Figure 4. Some bird species recorded of the ESEC Cuniã. **A.** *Tinamus guttatus*. **B.** *Crypturellus cinereus*. **C.** *Crypturellus strigulosus*. **D.** *Penelope jacquacu*. **E.** *Pauxi tuberosa*. **F.** *Cochlearius cochlearius*. **G.** *Harpagus bidentatus*. **H.** *Psophia leucoptera*. **I.** *Leptotila verreauxi*. **J.** *Leptotila rufaxilla*.

***Geotrygon montana* (Linnaeus, 1758)**
Figure 5A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 4.VII.2018; camera trap photographs; captured with mist-nets and banded; plots T01, T03, T24, R06; mist-netsCEMAVE-J12162; males and females.

Identification. This species is 24 cm long. There is a pale line on the face. Males have reddish-brown plumage, but in females is the plumage is olivaceous brown.

Family Cuculidae

***Piaya melanogaster* (Vieillot, 1817)**
Figure 5B

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.VII. 2017; photographic record; trail L4; WA3826894.

Figure 5. Some bird species recorded of the ESEC Cuniã. **A.** *Geotrygon montana*. **B.** *Piaya melanogaster*. **C.** *Coccyzus melacoryphus*. **D.** *Threnetes leucurus*. **E.** *Phaethornis ruber*. **F.** *Phaethornis philippii*. **G.** *Campylopterus largipennis*. **H.** *Topaza pella* (female). **I.** *Thalurania furcata* (male).

Identification. This species is 39 cm long. It has a bright red bill, gray cap, and a spot of bare, yellow skin in front of the eye. The iris is reddish iris. The body is reddish with a dusky lower belly. It has a very long, dark-chestnut tail with broad white tips.

Coccyzus melacoryphus **(Vieillot, 1817)**
Figure 5C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 18.VI.2018; photographic record; camp; WA3091346.

Remarks. We observed this species feeding.

Identification. This species is 27 cm long. It has gray upper parts and buff underparts. The orbital skin is yellow. It has dark tail, with large white spots, and a dark bill.

Coccyzus americanus **(Linnaeus, 1758)**
Figure 2C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; photographic record; trail L4; WA3826894.

Identification. This species is 25 cm long. It has a black bill with a yellow mandible. The eye-rings are gray, the head and upper parts are brown, and the underparts are white. The throat and breast have a grayish tint.

Family Strigidae

Glaucidium hardyi **(Vielliard, 1990)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; sound record; trail L4; WA4045902.

Identification. This species is 15 cm long. It call is a sequence of 10–36 short, unmodulated whistles which are slightly descending in frequency and volume, lasting up to 3 seconds, and repeated at regular intervals.

Family Trochilidae

Threnetes leucurus **(Linnaeus, 1766)**
Figure 5D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.VII.2018; captured with mist-nets and banded; plots T29, R02, R10, R12, R15, R16, R18; CEMAVE-A56515.

Identification. This species is 11.5 cm long. The body is dark green, with a buffy broad band across the base of the neck, and a broad pale malar streak. The tail is white.

Phaethornis ruber **(Linnaeus, 1758)**
Figure 5E

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.VII.2018; captured with mist-nets and banded; plots T05, T30, R11, R16; CEMAVE-A56521.

Identification. This species is 8 cm long. Males have a black band across the breast, which in females is reduced or absent. Both sexes have a narrow black mask through the eye, bordered above with a rufous stripe. The bill is long, slightly decurved, and with a yellow lower mandible. The tapered tail feathers have whitish-buff tips.

Phaethornis philippii **(Bourcier, 1847)**
Figure 5F

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T01, T02, T04, T05, T07, T08, T09, T10, T12, T15, T17, T18, T19, T20, T22, T23, T24, T25, T27, T28, T29, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R15, R16, R17, R18; CEMAVE-A54901.

Remarks. This species was the most abundant in the study grid at ESEC-Cuniã and was observed frequently in all the different habitat types, both in várzea forest and

more open areas. Apparently, the species is not a habitat specialist.

Identification. This species has a mean body length of 14 cm. The superciliary and infra-ocular bands are ochre and delimited by a black line. The upper plumage is green-ochraceous, and the wings are black. The underparts are orangey-ochre. Central tail feathers are elongated and with white tips.

***Campylopterus largipennis* (Boddaert, 1783)**
Figure 5G

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 4.III.2018; captured with mist-nets and banded; plots T12, T29, R11; CEMAVE-A56526.

Identification. This species has a mean body length of 14 cm. It has green upperparts and gray underparts. The tail is dusky, broad, and with large white tips. The bill is slightly decurved and black.

***Topaza pella* (Linnaeus, 1758)**
Figure 5H

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 11.VIII.2018; captured with mist-nets and banded; plot T15; CEMAVE-A56507; female.

Identification. This species has a mean body length of 23 cm in males and 14 cm in females. The male has iridescent, crimson plumage and a sparkling-green throat. Belly and breast are metallic orange-red. The wings are brown and maroon in their lower part. The long tail coverts are golden green. The bird has short, slightly curved beaks.

***Thalurania furcata* (Gmelin, 1788)**
Figure 5I

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 29.I.2018; captured with mist-nets and banded;plots T10 T18, T25, T29, R03, R07, R10, R11, R16; mist-netsCEMAVE-A54902; male and female.

Identification. This species has a mean body length of 10 cm. The male has an iridescent-green throat and upper breast. The underparts are deep iridescent blue. The tail is bluish and forked, and the upperparts are dull green in males. In females the upperparts are green and the underparts are gray, with green on the sides of the breast and belly.

Family Trogonidae

***Trogon viridis* (Linnaeus, 1766)**
Figure 6A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 11.I.2019; photographic records; plot R17; WA3838905; female.

Identification. This species has a mean body length of 28 cm. Males are dark iridescent blue on the head and breast, iridescent green on the back, and have a blue-gray bill and large, white tail tips which gives the impression of having a white underside of the tail. Females are dusky-gray and have a gray-blue bill and a white-barred underside of the tail, with white terminal spots.

***Trogon curucui* (Linnaeus, 1766)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; sound records; trail L4; WA3838905.

Identification. This species has a mean body length of 25 cm. Males are iridescent blue on the head and breast and iridescent green on the back. Females are gray and have a noticeable, white eye ring.

***Trogon rufus* Gmelin, 1788**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.VII.2017; photographic records; camp; WA3838905; female.

Family Alcedinidae*Chloroceryle aenea* (Pallas, 1764)

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 20.VIII.2018; captured with mist-nets and banded; plots T24, T25, R04, R07, R08, R09, R10, R15, R18; CEMAVE-D85536; males and females.

***Chloroceryle inda* (Linnaeus, 1766)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plots T25, T29, R05, R09; CEMAVE-H75610; males and females.

Family Momidae

***Electron platyrhynchum* (Leadbeater, 1829)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T06, R08, R09, R12; CEMAVE-H75622.

Family Galbulidae

***Galbula cyanicollis* Cassin, 1851**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.VII.2017; captured with mist-nets and banded; photographic records; plots T15, T29, R01, R02, R15; mist-netsCEMAVE-D85553;WA3829204; males and females.

***Galbula ruficauda* Cuvier, 1816**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 6.III.2018; captured with mist-nets and banded; plot T24; CEMAVE-F59512; male.

***Galbula dea* (Linnaeus, 1758)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 01.XI.2018;

photographic record; plot R07;WA3822213.

Family Bucconidae

***Bucco macrodactylus* (Spix, 1824)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 10.X.2018; captured with mist-nets and banded; plot R15; CEMAVE-H75624.

***Bucco tamatia* Gmelin, 1788**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 19.VIII.2018; captured with mist-nets and banded; plot R05; CEMAVE-H89414.

***Nystalus obamai* Whitney, Piacentini, Schunck, Aleixo, Sousa, Silveira & Rêgo, 2013**
Figure 3A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 15.I.2019; photographic record; trail L3; WA3841845.

Distribution. This species is distributed in the western basin of the Madeira River to south of the Solimões River. It occurs in humid terra firme forests within the várzea and along the sides of roads. It is absent from the high forests on sandy soils and the campina and campinarana vegetation types (Whitney et al. 2013).

Identification. The mean length of this species is 20 cm. The mantle has blackish feathers without pale terminal fringes, and the belly is pale with dark vertical streaks. The bill is yellow, and the crown and back are brown.

***Malacoptila rufa* (Spix, 1824)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 02.II.2018; captured with mist-nets and banded; plots T02, T09, T12, T19, T21, T27; CEMAVE-H89413.

***Monasa morphoeus* (Hahn & Küster, 1823)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded;plot T24, T25, R10; CEMAVE-J49763.

Family Capitonidae

***Capito niger* (Statius Müller, 1776)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; photographic record; trail L3; WA3826289.

Family Ramphastidae

***Ramphastos tucanus cuvieri* (Linnaeus, 1758)**
Figure 2A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 15.I.2019; photographic record; plot T03; WA3826331.

Figure 6. Some bird species recorded of the ESEC Cuniã. **A.** *Trogon viridis* (female). **B.** *Selenidera reinwardtii langsdorffii* (male). **C.** *Neoctantes niger* (female). **D.** *Myrmotherula axillaris*(male). **E.** *Myrmelastes humaythae* (female). **F.** *Myrmoborus myotherinus* (male). **G.** *Akletos goeldii* (male). **H.** *Willisornis poecilinotus* (male). **I.** *Oneillornis salvini* (male). **J.** *Formicarius colma.*

Identification. This species has a mean length of 58 cm. The bill is dark red, while the culmen has a yellow stripe on top and blue stripe below, with a black basal line. The throat is white and with a red collar. The plumage is predominantly black.

***Selenidera reinwardtii langsdorffii* (Wagler, 1827)**
Figure 6B

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T07, R07; CEMAVE-J20939; males.

Identification. This species measures 34 cm. The basal half of the bill is greenish-gray and the tip is black. Males have black plumage, and the underparts are dark green, while females have chestnut-colored plumage. The species has green skin around the eyes. It has a bright yellow post-ocular band.

***Pteroglossus mariae* Gould, 1854**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 03.II.2018; captured with mist-nets and banded; plot T13; CEMAVE-N8043; male.

***Pteroglossus beauharnaisii* Wagler, 1831**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 12.VIII.2018; captured with mist-nets and banded; plot T10; CEMAVE-R36667; male.

Family Picidae

***Veniliornis affinis* (Swainson, 1821)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 13.VIII.2018; captured with mist-nets and banded; plot T04; CEMAVE-F45105; male.

***Piculus flavigula* (Boddaert, 1783)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2018; audio recording; plot T21; WA3091283.

***Campephilus rubricollis* (Boddaert, 1783)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; audio recording; trail L3; WA3826330.

Family Psittacidae

***Pyrrhura lucianii* (Deville, 1851)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; audio recording; trail L4; WA3839025.

Remarks. We observed a collective flying over trail L4.

Identification. This species measures 22 cm long. It was identified by comparing its vocalization with the recordings available at the Wikiaves and Xeno-canto digital platforms.

***Pionus menstruus* (Linnaeus, 1766)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2014; audio recording; trail L3; WA3826899.

***Amazona farinosa* (Boddaert, 1783)**

Figure 2B

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2017; photographic record; trail L3; WA3829206.

Identification. This species has a mean length of 40 cm and is the largest species of the genus. Its plumage is entirely green, covered with a very fine white powdering. The forehead is yellow, blue, and red, and there is a white bill and periothalmic ring.

Family Thamnophilidae

***Pygiptila stellaris* (Spix, 1825)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; captured with mist-nets and banded; plots T17, R15; CEMAVE-E12750; male and female.

***Neoctantes niger* (Pelzeln, 1859)**

Figure 6C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 06.III.2018; plot T24; CEMAVE-F 59547; female.

Identification. This species has a mean length of 16 cm. The bill is bluish-gray, with the mandible upturned near its tip. Males are all black, while females have chestnut-colored underparts and black upperparts and head.

***Epinecrophylla haematonota* (Sclater, 1857)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; captured with mist-nets and banded; plots T02, T10, T12, T15, T17, T19, T20, T21, T22, T23, T27, T29, T30, R01, R06, R10; CEMAVE-C70603; males and females.

***Myrmotherula axillaris* (Vieillot, 1817)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T01, T02, T05, T06, T07, T08, T09, T10, T13, T15, T17, T21, T22, T28, T29, R03, R05, R06, R07, R12; CEMAVE-C13573; males and females.

***Myrmotherula longipennis* Pelzeln, 1868**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots R07, R08; CEMAVE-C92120; male.

***Myrmotherula assimilis* Pelzeln, 1868**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 18.VIII.2018; captured with mist-nets and banded; plot R08; CEMAVE-C92122.

***Thamnomanes saturninus* (Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plot R08; CEMAVE-E164106; female.

***Thamnomanes caesius* (Temminck, 1820)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 23.VII.2018; captured with mist-nets and banded; plots T05, T23, T24, R08, R11; CEMAVE-D77121; males and females.

***Thamnophilus schistaceus* d'Orbigny, 1835**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação

Ecológica de Cuniã; first record on 23.VII.2017; audio recording; trail L4; WA4017900.

***Thamnophilus murinus* Sclater & Salvin, 1868**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T02, T08, T15, T19, T20, T21, T26, T28, T29, R10, R17; CEMAVE-D77109; males and females..

***Thamnophilus aethiops* Sclater, 1858**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T04, T05, T06, T08, T10, T12, T21, T23, T27, T30, R06; CEMAVE-F45107; males and females.

***Cymbilaimus lineatus* (Leach, 1814)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 04.III.2018; captured with mist-nets and banded; plots T29, R18; CEMAVE-G90688; males.

***Frederickena unduliger* (Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 4.II.2018; captured with mist-nets and banded; plot T03; CEMAVE-J54998; female.

***Hypocnemoides maculicauda* (Pelzeln, 1868)**

Records. BRAZIL• BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plots T25, R06, R11, R15, R17; CEMAVE-D85579; males and females.

***Hylophylax naevius* (Gmelin, 1789)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plots T25, R11, R14, R15; CEMAVE-D85549; males and females.

***Myrmelastes hyperythrus* (Sclater, 1855)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 09.IX.20; captured with mist-nets and banded; plot R18; CEMAVE-D85549; female.

***Myrmelastes humaythae* (Hellmayr, 1907)**
Figure 6D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 21.IX.2018; captured with mist-nets and banded; plots R02, R01; CEMAVE-G131516; males and females.

Identification. This species has a mean length of 26 cm. The plumage in males is gray, while in females it is rusty brown.

***Myrmelastes leucostigma* (Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 04.III.2018; captured with mist-nets and banded; plots T29, R05, R07; CEMAVE-E78330; male.

***Myrmoborus myotherinus* (Spix, 1825)**
Figure 6E

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 06.III.2018; camera trap record; captured with mist-nets and banded; plots T02, T12, T15, T17, T27, T30, R07, R09; CEMAVE-D77143; males and females.

Identification. This species has a mean length of 13.5 cm. The iris is dark red. Males have gray upperparts, with black wing coverts, and the underparts are powdery gray. Female have rufous-brown upperparts, black wing coverts, and brown wing bars. This spcies has a black mask through the eye, a white throat.

***Akletos goeldii* (Snethlage, 1908)**
Figure 6F

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 19.VIII.2018; captured with mist-nets and banded; plot N2; CEMAVE-H89406; male.

Identification. This species has a mean length of 17 cm. Males have black plumage, while in females, it is rufous. Both sexes have a bare, periophthalmic ring and a yellow iris.

***Hafferia fortis* (Sclater & Salvin, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 22.VII2018; captured with mist-nets and banded; plots T05, T12, R03, R16; CEMAVE-G94818; males and females.

***Cercomacroides nigrescens* (Cabanis & Heine, 1859)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T05, T06, T15, R12, R18; CEMAVE-D8558; males and females.

***Cercomacroides serva* (Sclater, 1858)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I. 2018; captured with mist-nets and banded; plot T06; CEMAVE-D77130; male.

***Hypocnemis peruviana* Taczanowski, 1884**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 03.III.2018; captured with mist-nets and banded; plots T10, T11, T15, T18, T19, T24, T25, T27, T29, T30 R02, R03, R06, R08, R09, R10, R11, R12, R14, R15, R16, R18; CEMAVE-D77101; males and females.

***Willisornis poecilinotus* (Cabanis, 1847)**
Figure 6G

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T02, T05, T07, T10, T12, T15,T16, T17, T18, T19, T23, T24, T30, R01, R03, R04, R05, R06, R07, R09, R10, R12, R14, R16, R18; CEMAVE-D77119; males and females.

Remark. The species is typical of the lowland plains, preferring habitats away from streams according to Cintra and Cancelli (2008); however, we observed more individuals in riparian habitats than in terra firme forest.

Identification. This species has a mean length of 13 cm. Males are gray and females are rusty brown. The tail and wings have whitish borders.

***Phlegopsis erythroptera* (Gould, 1855)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.VII.2018; captured with mist-nets and banded; plot T29; CEMAVE-D77119; female.

***Oneillornis salvini* (Berlepsch, 1901)**
Figure 6H

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T03, T05, T12, T15, T19, T20, T23, T24, T27, T29 T30, R01, R02, R04, R05, R06, R07, R08, R10, R11, R15, R16, R17, R18; CEMAVE-H89408; males and females.

Remark. We observed a nest in a cavity of a tree trunk along the access trail in PPBio. Here the elevation is 2750 m.

Identification. Species has a mean length of 14.5 cm. Males are gray, with a white throat and supraloral stripe and a blackish tail barred with white. Females have a blackish crown and rufous face. This monotypic species is endemic to the Inambari interfluve. It is classified as an antbird, associated with swarms of army ants.

***Rhegmatorhina melanosticta* (Sclater & Salvin, 1880)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T03, T05, T10, T11, T18, T20 T23, R08, R10, R12; CEMAVE-F45101; females.

Family Formicariidae

***Formicarius colma* (Boddaert, 1783)**
Figure 6I

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 07.III.2018; camera trap record; captured with mist-nets and banded; plots T15, T20 T24, R03, R05, R06, R07, R09; CEMAVE-G94827.

Identification. This species has a mean length of 18 cm. It is olive-gray and the only antthrush with a rufous cap. The face, sides of the head and breast, down to the mid-belly, are black.

Family Scleruride

***Sclerurus macconnelli* Chubb, 1919**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.VII.2018; captured with mist-nets and banded; plots T10, T20, T27, R07, R18; CEMAVE-D150847.

***Sclerurus caudacutus* (Vieillot, 1816)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.VII.2018; captured with mist-nets and banded; plots T05, T20; CEMAVE-G131373.

Family Dendrocolaptidae

***Dendrocincla fuliginosa* (Vieillot, 1818)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T09, T11, T12, T17, T23, T29, R02, R03, R04, R05 R16, R18; CEMAVE-G94836.

***Dendrocincla merula* (Lichtenstein, 1829)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T04, T07, T08, T09, T10, T11, T12, T13, T14, T15, T16, T20, T25, T29, T30, R04, R06, R07, R10, R11, R12, R17; CEMAVE-E127522.

***Deconychura longicauda* (Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 15.II.2018; captured with mist-nets and banded; plots T21, T27, R04; CEMAVE-F45135.

***Certhiasomus stictolaemus* (Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T01, T05, T07, T08, T09, T10, T12, T13, T14, T15, T17, T19, T20, T21, T22, T23, T24, T25, T28, R04, R08, R17; CEMAVE-D77117.

***Glyphorynchus spirurus* (Vieillot, 1819)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T02, T05, T10, T11, T16, T18, T22, T24, T25, R01, R02, R04, R05, R06, R07, R08, R09, R10, R11, R15, R16, R18; CEMAVE-D77103.

***Xiphorhynchus ocellatus* (Spix, 1824)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 15.II.2018; captured with mist-nets and banded; plots T24, T25, T27, R02, R04, R05, R07, R08, R15, R16, R17; CEMAVE-G90625.

Xiphorhynchus elegans **(Pelzeln, 1868)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T02, T04, T05, T07, T08, T10, T11, T12, T13, T15, T16, T17, T19, T21, T23, T24, T27, T28, T29, T30, R01, R02, R03, R04, R06, R16, R17, R18; CEMAVE-E173427.

Xiphorhynchus guttatoides **(Lafresnaye, 1850)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 21.IX.2018; captured with mist-nets and banded; plots R02, R15, R16; CEMAVE-J49756.

Campylorhamphus gyldenstolpei **Aleixo, Portes, Whittaker, Weckstein, Gonzaga, Zimmer, Ribas & Bates, 2013**

Figure 3B

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 29.I.2018; audio recording; captured with mist-nets and banded; plots T18, T29, R03, R18; WA3091308; CEMAVE-G94829.

Identification. This species has a mean length of 24 cm. The head of this species is uniformly sepia, with short, light-brownish stripes, including on the forehead and cheeks. The tarsi and feet are bluish-green. This species was recently separated from *Campylorhamphus procurvoides* (Lafresnaye, 1850) and described by Aleixo et al. (2013).

Dendroplex picus **(Gmelin, 1788)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plot T25; CEMAVE-E173429.

Lepidocolaptes fatimalimae **Rodrigues, Aleixo, Whittaker & Naka, 2013**

Figure 3C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.VII.2018; photographic record; trail L5; WA3841829.

Remarks. The species was recorded within an area of terra firme forest dominated by *Lepidocaryum tenue* Mart. palms, which are known locally as caranaí.

Identification. This species has a mean length of 19 cm. The head is dark brown and without spots. The iris is dark brown. The bill is relatively long, creamy white, and curved. The jaw is grayish with a dark brown base. The tarsi and feet are grayish-olive (Rodrigues et al. 2013).

Dendrocolaptes certhia juruanus **(Ihering, 1905)**

Figure 7A

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 17.I.2018; captured with mist-nets and banded; photographic record; plots T10, T14, R02; CEMAVE-J49754; WA3314112.

Identification. This species has a mean length of 28 cm. It has continuous barring on the underparts and head, and the bill is reddish. The wings and tail are rufous and unmarked. The sides of the head, malar area, and throat are pale. In Brazil it occurs in the southwestern Amazon region between the foothills of the Andes and the left bank of the Madeira River, and in northern Bolivia it occurs in the Inambari area of endemism.

Hylexetastes stresemanni **(Snethlage, 1925)**

Figure 6J

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 23.VII. 2018; captured with mist-nets and banded; plots T05, T07; T08; CEMAVE-J200938.

Identification. This species has a mean length of 30 cm. The head, mantle, and breast are rufous-brown. The belly is barred, and the bill is long, thick, and reddish-gray to reddish. The throat has buffy streaks.

Family Xenopidae

Xenops minutus **(Sparrman, 1788)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28. I.2018; captured with mist-nets and banded; plots T16, T20, R02, R06, R12; CEMAVE-D77150.

Family Furnariidae

Ancistrops strigilatus **(Spix, 1825)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T11, T24, R11; CEMAVE-E99084.

Automolus subulatus **(Spix, 1824)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T12, T18, R04; CEMAVE-E164122.

Automolus ochrolaemus **(Tschudi, 1844)**

Figure 7B

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T02, T04; T06, T15, T17, T23, T24, T25, T29, R01, R03, R04, R05, R06, R09, R10; CEMAVE-H75625.

Identification. This species has a mean length of 19 cm. It is rufous-brown above and with rufous wings and tail. The underparts are brown, with faint buff streaks on the breast. The throat, lower sides of the neck, and eye-ring are buff. The supercilium is indistinct.

Automolus infuscatus **(Sclater, 1856)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T07, T24, R04, R05,

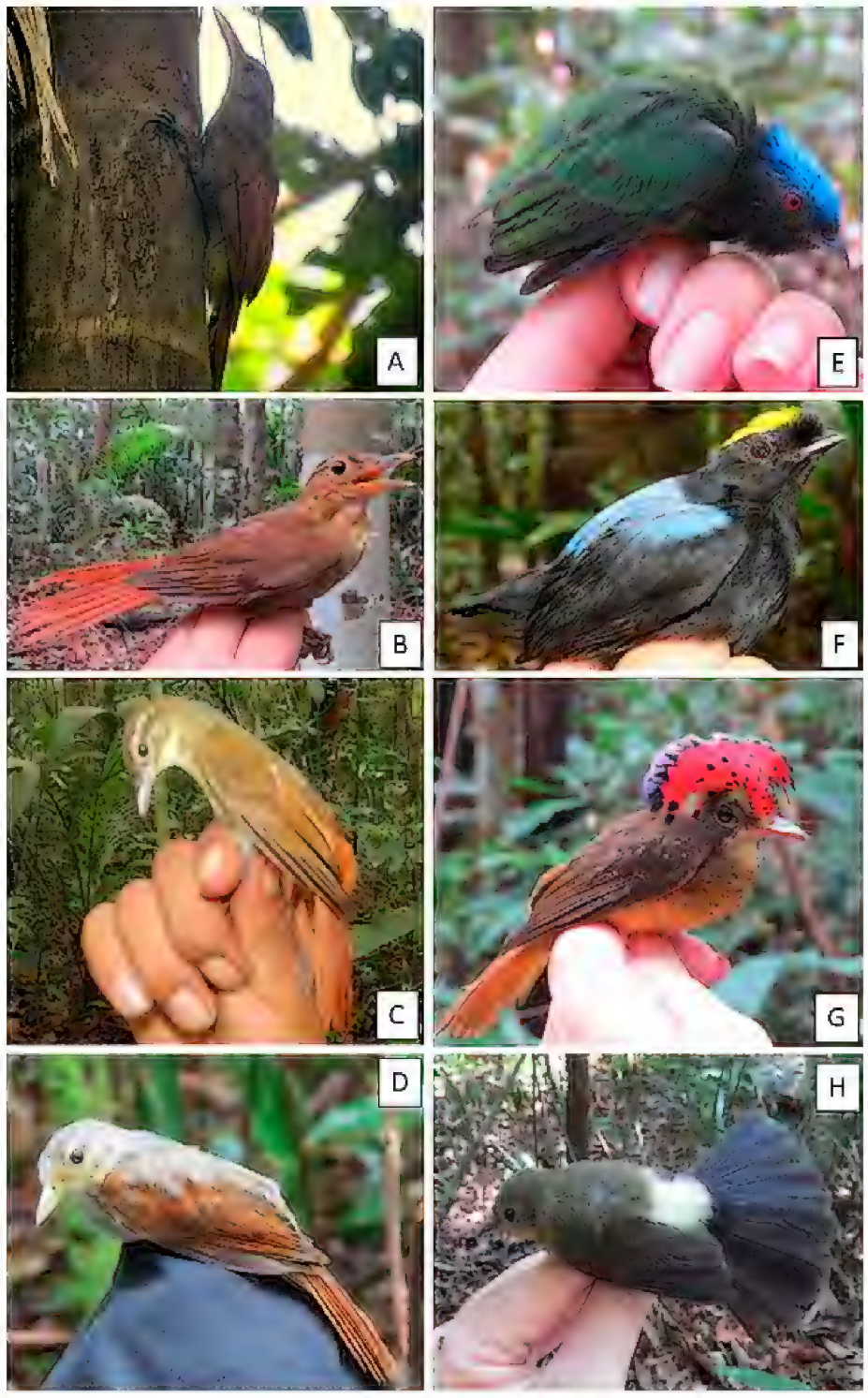

Figure 7. Some bird species recorded of the ESEC Cuniã. **A.** *Dendrocolaptes juruanus*. **B.** *Automolus ochrolaemus*. **C.** *Philydor erythrocercum*. **D.** *Philydor erythropterum*. **E.** *Lepidothrix coronata caelestipileata* (male). **F.** *Chiroxiphia pareola regina* (male). **G.** *Onychorhynchus coronatus* (male). **H.** *Myiobius barbatus*.

R06, R07, R09, R10; CEMAVE-G94845.

***Philydor erythrocercum* (Pelzeln, 1859)**
Figure 7C

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 17.II.2018; captured with mist-nets and banded; plots T10, T23, T22, T25, R01, R08; CEMAVE-F45115.

Identification. This species has a mean length of 17 cm. It has olive-brown upperparts and a rufous rump and tail. The throat is pale buff, as are the lores and supercilium.

***Philydor erythropterum* (Sclater, 1856)**
Figure 7D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 23.II.2018; captured with mist-nets and banded; plots T13, T20; T23, R01, R04, R09, R14, R16, R18; CEMAVE-D150825.

Identification. This species has a mean length of 17 cm. It has a grayish-brown mantle, while the wing and tail are rufous. The underparts are buff-brown. The face and throat are yellow-buff. It has an indistinct, buff supercilium.

***Philydor pyrrhodes* (Cabanis, 1848)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 09.I.2018; captured with mist-nets and banded; plots R07, R08; CEMAVE-E1734413.

***Synallaxis rutilans* Temminck, 1823**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; captured with mist-nets and banded; plots T17, T23; CEMAVE-E127524.

Family Pipridae

***Ceratopipra rubrocapilla* (Temminck, 1821)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 29.I.2018; captured with mist-nets and banded; photographic record; plots T04, T08, T11, T14, T15, T17, T19, T20, T21, T25, T30, R05, R09, R10, R11, R15, R16, R18; CEMAVE-C92140; WA3005920; males and females.

***Lepidothrix coronata caelestipileata* (Spix, 1825)**
Figure 7E

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T02, T04, T05, T09, T10, T12, T14, T15, T16, T18, T19, T21, T22, T23, T24, T25, T27, T29, R01, R02, R03, R04, R06, R07, R08, R10, R11, R15, R16, R17, R18; CEMAVE-C43153; males and females.

Identification. This species has a mean length of 9 cm. Males have a blue crown with green plumage, and female have green plumage with a yellowish belly.

***Manacus manacus* (Linnaeus, 1766)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 12.VIII.2018; captured with mist-nets and banded; plots T10, R08, R09, R12, R18; CEMAVE-D150831; females.

***Heterocercus linteatus* (Strickland, 1850)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plots T24, T25, R06, R07, R09, R10, R11, R12, R14, R15, R18; CEMAVE-D85569; males and females.

***Chiroxiphia pareola* regina (Linnaeus, 1766)**
Figure 7F

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 18.IX.2018; captured with mist-nets and banded; plots R09, R18; CEMAVE-D150826; males and females.

Identification. This species has a mean length of 11.5 cm. Males have a yellow crown with black plumage and a sky blue mantle, while females have green plumage above and grayish-green plumage below.

Family Onychorhynchidae

***Onychorhynchus coronatus* (Statius Müller, 1776)**
Figure 7G

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.VII.2018; captured with mist-nets and banded; plots T21, T22, T24, T29, R03, R04, R09, R10, R11, R17, R18; CEMAVE-D150834; males and females.

Identification. This species has a mean body length of 15 cm. It has an ornate crest kept mostly flattened. The bill is relatively long and bicolored. It has brown upperparts with a cinnamon rump and tail while the underparts are rufous-brown and thinly barred with black.

***Terenotriccus erythrurus* (Cabanis, 1847)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; captured with mist-nets and banded; photographic record; plots T11, T15, T16, T19, R02; CEMAVE-C92045; WA3826892.

***Myiobius barbatus* (Gmelin, 1789)**
Figure 7H

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; 28.VII.2018; captured with mist-nets and banded; plots T25, R03, R04, R05, R06, R08 R11; CEMAVE-D85577.

Identification. This species has a mean body length of 12.5 cm. The male has a yellowish crown, with conspicuous sulphur-yellow thighs and rounded posterior tail. The throat and breast are grayish-olive green, and the plumage of the underparts is pale yellow.

Family Tityridae

***Schiffornis turdina* (Wied, 1831)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T02, T03, T04, T05, T06, T07, T13, T14, T19, T23, T27, T28, T30, R01, R03, R04, R05, R07, R09, R17; CEMAVE-E164108.

***Laniocera hypopyrra* (Vieillot, 1817)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 29.I.2018; captured with mist-nets and banded; plots T04, T18, T29, R02; CEMAVE-G90645.

Family Contigidae

***Lipaugus vociferans* (Wied, 1820)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 13.I.2018; captured with mist-nets and banded; plots T16, R06, R08; CEMAVE-J49762.

***Xipholena punicea* (Pallas, 1764)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 16.I.2019; photographic record; plot R07; WA3829214.

Family Pipritidae

***Piprites chloris* (Temminck, 1822)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 22.VI.2018; captured with mist-nets and banded; plot T12; CEMAVE-C92002.

Family Rhynchocyclidae

***Cnipodectes subbrunneus* (Sclater, 1860)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 25.I.2018; captured with mist-nets and banded; plots T06, T10, T21, T23, T24, T27, R04, R17; CEMAVE-E127557.

***Mionectes oleagineus* (Lichtenstein, 1823)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 28.I.2018; captured with mist-nets and banded; plots T03, T11, T15, T16, T18, T29, R05, R06, R07, R09, R10, R11, R17, R18; CEMAVE-D77124.

***Corythopis torquatus* Tschudi, 1844**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.VII.2018; captured with mist-nets and banded; plot T16; CEMAVE-E12753.

***Rhynchocyclus olivaceus* (Temminck, 1820)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 22.IX.2018; captured with mist-nets and banded; plot R12; CEMAVE-D77118.

***Hemitriccus minor* (Snethlage, 1907)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T02, T12, T15, T24, T25, T30, R01, R03, R09, R16, R18; CEMAVE-C73189.

***Hemitriccus minimus* (Todd, 1925)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 26.I.2018; captured with mist-nets and banded; plots T07, T20, R02, R12, R15; CEMAVE-D85540.

Family Tyrannidae

***Ramphotrigon ruficauda* (Spix, 1825)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.VII.2018; captured with mist-nets and banded; photographic record; plots T17, R09; CEMAVE-D77142; WA382921.

Family Troglodytidae

***Microcerculus marginatus* (Sclater, 1855)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação

Ecológica de Cuniã; first record on 20.IX.2018; captured with mist-nets and banded; plot R17; CEMAVE-F45150; male.

***Pheugopedius genibarbis* (Swainson, 1838)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 20.IX.2018; captured with mist-nets and banded; plots R14, R18; CEMAVE-D85545.

Family Turdidae

***Turdus lawrencii* Coues, 1880**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 15.I.2019; photographic record; plot R05; WA3285125.

***Turdus sanchezorum* O'Neill, Lane & Naka, 2011**
Figure 3D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 09.I.2019; captured with mist-nets and banded; plot R18; CEMAVE-H89432.

Identification. The plumage of this species is very similar to that of the other *Turdus* species (Guilherme 2013), but in this species the tail is reddish-brown, and the the naked ocular orbital ring is pale yellow-orange. The identificastion was confirmed using comparisons with photographs and on the expert advice of Dr. Edson Guilherme, coordinator of the Ornithology Laboratory of Federal University of Acre.

***Turdus ignobilis* Sclater, 1858**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 21.IX.2018; captured with mist-nets and banded; plot R18; CEMAVE-G90675.

***Turdus albicollis* Vieillot, 1818**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 02.II.2018; captured with mist-nets and banded; CEMAVE-G131365.

Family Parulidae

***Myiothlypis fulvicauda* (Spix, 1825)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 06.III.2018; captured with mist-nets and banded; plots T24, R04, R05, R06, R08, R11, R15, R16; CEMAVE-C70611.

Family Mitrospingidae

***Lamprospiza melanoleuca* (Vieillot, 1817)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 16.I.2019; photographic record; plot R07; WA3285247.

Family Thraupidae

***Volatinia jacarina* (Linnaeus, 1766)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 24.I.2018; captured with mist-nets and banded; plots T01, T21; CEMAVE-D77115.

***Tersina viridis* (Illiger, 1811)**
Figure 2D

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 14.I.2019; photographic record; plot R07; WA4051327.

Identification. This species has a mean body length of 15 cm. Males have blue plumage, with the mask and throat black and the center of the belly white; there is fine, dusky barring on the flanks. Females are green with a yellow belly and dusky barring on the sides of the belly and flanks.

***Saltator maximus* (Statius Müller, 1776)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.VII.2018; captured with mist-nets and banded; plot T24; CEMAVE-G131501.

Family Cardinalidae

***Habia rubica* (Vieillot, 1817)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 31.I.2018; captured with mist-nets and banded; plots T12, T15, R08, R10, R11; CEMAVE-E127525; males and females.

***Cyanoloxia rothschildii* (Bartlett, 1890)**

Records. BRAZIL – **Rondônia** • Porto Velho, Estação Ecológica de Cuniã; first record on 27.I.2018; captured with mist-nets and banded; plots T11, T20, T29, R02, R12, R14, R15, R16, R18; CEMAVE-H75611; males and females.

Discussion

The ESEC Cuniã is a protected area that includes a variety of microhabitats (ICMBio 2018a) and considerable diversity of bird species, even though the local vegetation is relatively homogeneous compared to other areas in the Amazon basin (Andrade et al. 2017). An ornithological inventory, part of an environmental impact study for the construction of hydroelectric dams on the left bank of the Madeira River, reported 294 species of birds at nine different locations in the Madeira-Purus interfluvium (Cohn-Haft et al. 2007), and other studies, in support of management plans of federal conservation unitsin the interfluvium, yielded 454 species (ICMBio 2018a, 2018b). These studies suggest that the species richness recorded by us should be expected to be greater with an increased survey effort in ESEC Cuniã. We found that the understory avifauna at ESEC Cuniã is diverse in comparison

to other studies in the central Amazon region, which followed a system of standardized protocols (Bueno et al. 2012; Guilherme and Cintra 2001; Menger et al. 2017) and Western Amazonia (Menger 2011). Our records of four bird species (*Lepidocolaptes fatimalimae*, *Nystalus obamai*, *Campylorhamphus gyldenstolpei*, and *Turdus sanchezorum*), which were described only in the last decade (O'Neill et al. 2011; Aleixo et al. 2013; Rodrigues et al. 2013; Whitney et al. 2013), extend the geographic distributions these taxa. The finding of these first records confirm that the avifauna in parts of the Amazonian plains remains poorly investigated (Menger 2011). Thus, additional surveys in the region are extremely important to expand scientific knowledge of the local avifauna.

Coccyzus americanus breeds in eastern North America and migrates south through Central America to arrive in Brazil, where it remains from November through May (Somenzari et al. 2018). Our records, the first for this species from ESEC Cuniã, indicate that *C. americanus* arrives in the study area, in the month of July, at the beginning of the boreal winter. Our records are only the third report of this species in Rondônia (WikiAves 2020). The conservation of migratory birds depends on the reliable information on feeding, resting, and breeding sites (Valente et al. 2011). Understanding migratory patterns and the geographic connectivity of the populations is essential for planning sound long-term management measures (Somenzari et al. 2018). The occurrence of migratory species in the ESEC Cuniã indicates that this area has the resources necessary for the maintenance and conservation of these species.

Turdus sanchezorum is a cryptic species described in 2011 (O'Neill et al. 2011) which havs plumage very similar to that of *T. hauxwelli* (Guilherme 2013). It occurs in lowland environments in the southwestern Amazon (O'Neill et al. 2011). This species had been previously reported from the municipalities of Carauari, Careiro do Várzea, Iranduba and Lábrea in the Rio Acre basin (Guilherme 2013; WikiAves 2020). Our record from ESEC Cuniã is the first from the state of Rondônia and may be important for the conservation of this species.

Phaethornis philippii, *Oneillornis salvini*, and *Willisornis poecilionotus* were the species captured most frequently in mist-nets in both terrestrial and riparian environments, and these species may be among the most abundant species in these floodplain environments. Mist-netting also captured species endemic to the interfluve region. Range-restricted endemic bird species are more susceptible to extinction due to habitat loss than widely distributed species, and the occurrence of endemic species should guide decision-making on both the creation and management of protected areas (Guilherme 2016), and for the conservation of Amazonian and particularly floodplain biodiversity.

Pyrrhura lucianii was elevated from a subspecies of *P. picta* (Statius Müller, 1776) to full species status by Joseph (2002) and recognized by the Brazilian Committee for Ornithological Records (Piacentini et al. 2015). Endemic to Brazil, its distribution is restricted to areas south of the Solimões River, includingits type locality at Tefé and part of the Purus River (Joseph 2002). The species has been recorded in the states of Amazonas (Laranjeiras 2013; Lopes 2014; Marques 2016) and Acre (Souza et al. 2018). Our record is the first from the ESEC-Cuniã.

Tinamus guttatus, *Penelope jacquacu*, *Ortalis guttata*, and *Pauxi tuberosa* are medium-sized and large terrestrial birds (Thiollay 1992). These birds inhabit dark, humid understory where they feed primarily on fallen fruit and seeds. Their relatively large size makes them widely targeted game species in the Amazon region, particularly where habitats have been extensively fragmented (Peres 2001). Although these species may not be completely free from being hunted in the ESEC Cuniã, the ecological station may nevertheless help conserve populations of these birds.

The diversity of the Amazonian avifauna is explained by the varied available habitats and niche overlap (Wilson 1974). However, many bird species have difficulty dispersing into secondary forest matrices (Lees and Peres 2008), unless the secondary forests are connected to primary forests (Mayhew et al. 2019). Reduced habitat availability increasingly reduces population sizes and causes populations to be isolated from each other by interlying inhospitable habitats (Debinski and Holt 2000; Fahrig 2003; Fischer and Lindenmayer 2007). Thus, conservation units are fundamental for the protection of biodiversity (De Luca et al. 2009; Pereira et al. 2013) and are important resting and breeding sites for several bird species (De Luca et al. 2009). Conservation units enable the study of the biological community in its conserved state (Rylands and Pinto 1998) and act as barriers to anthropic changes in land use (Develey and Stouffer 2008).

However, the ongoing expansion of socioeconomic activities is the principal determinant of the conversion of continuous natural habitats into mosaic landscapes of anthropogenic habitats and forest fragments (Margulis 2003). The Cuniã Ecological Station is located adjacent to federal highway BR-319, which has recently been paved as far as the town of Humaitá in the neighboring state of Amazonas. The larger region around the ESEC Cuniã has been undergoing widespread deforestation and burn-off. The rapid extension of the "Arc of Deforestation" across the Amazon basin will significantly impact biodiversity.

Our data show that the ESEC Cuniã is potentially important for the conservation of birds of the Amazonian floodplain ecosystems. This ecological status supports a rich avifauna, including endemic species, and is an important stopover for migratory birds. However, ongoing expansion of anthropogenic activities reinforces the need for continuing systematic monitoring of the local bird fauna to support conservation priorities and the effective protection of this floodplain environment over the long term.

Acknowledgements

We thank Dr Edson Guilherme for confirming the *Turdus sanchezorum* and Vítor de Queiroz Piacentini for confirming the identification of *Campylorhamphus gyldenstolpei*. We are grateful to the Fundação Rondônia de Amparo ao Desenvolvimento das Ações Científicas e Tecnológicas e à Pesquisa do Estado de Rondônia for supporting our research, the Instituto Chico Mendes de Conservação da Biodiversidade for logistical support, and the Biogeochemical Laboratory at the Universidade Federal de Rondônia for technical and scientific support.

Authors' Contributions

TLSM designed the project, collected the data, identified the species, compiled and revised the occurrence records, and prepared the manuscript. UMO collected data, identified species, and revised the occurrence records. SSN collected data and revised the manuscript. MPDS identified the species and revised the occurrence records and the manuscript. AGM coordinated and designed the project, collected data, and revised the manuscript.

References

Aleixo A, Portes CEB, Whittaker A, Weckstein J, Gonzaga LA, Zimmer KJ, Ribas CC (2013) Molecular systematics and taxonomic revision of the Curve-billed Scythebill complex (*Campylorhamphus procurvoides*: Dendrocolaptidae), with description of a new species from western Amazonian Brazil. In: Engtrom RT (Ed.) Handbook of the birds of the world. Special volume: new species and global index. Lynx Edicions, Barcelona, Spain, 240–244.

Andrade RT, Pansini S, Sampaio AF, Ribeiro MS, Cabral GS, Manzatto ÂG (2017) Fitossociologia de uma floresta de terra firme na amazônia sul-ocidental, Rondônia, Brasil. Biota Amazônia 7: 36–43. https://doi.org/10.18561/2179-5746/biotaamazonia.v7n2p36-43

Begazo A (Ed.) (2020) Peru Aves. Corbidi, Lima, Peru. http://www.peruaves.org/. Accessed on: 2020-10-1.

Bóçon R (1999) Avifauna do Parque Estadual de Corumbiara, Rondônia - Brasil. In: Fang TG (Ed.) Manejo y conservación de fauna silvestre en América Latina. Instituto de Ecología, La Paz, 329–333.

Bueno AS, Anciães M, Araújo PSG, Freitas MA (2014) Protocolo para levantamento de aves de sub-bosque pelo método de captura com redes de neblina em módulos RAPELD do PPBio/CENBAM. PPBio, Manaus https://doi.org/10.13140/RG.2.1.3327.2406

Bueno AS, Bruno RS, Pimentel TP, Sanaiotti TM, Magnusson WE (2012) The width of riparian habitats for understory birds in an Amazonian forest. Ecological Applications 22 (2): 722–734. https://doi.org/10.1890/11-0789.1

Cintra R, Cancelli J (2008). Effects of forest heterogeneity on occurrence and abundance of the scale-backed antbird, *Hylophylax poecilinotus* (Aves: Thamnophilidae), in the Amazon forest. Revista Brasileira de Zoologia 25 (4): 630–639. https://doi.org/10.1590/S0101-81752008000400008

Cohn-Haft M, Pacheco AM, Bechtoldt CL, Torres MFNM, Fernandes AM, Sardelli CH, Macêdo IT (2007) Inventário ornitológico. In: Py-Daniel LR, Deus CP, Henriques AL, Pimpao DM, Riberiro OM (Eds.) Biodiversidade do médio Madeira: bases cientificas para propostas de conservaçao. Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil, 178pp.

Costa TM, Aguiar-Silva FH, Silva OD, Emerson M (2018) Diversidade de aves de rapina em uma paisagem fragmentada no sudoeste da diversidade de aves de rapina em uma paisagem fragmentada no sudoeste da Amazônia, Cacoal, Rondônia, Brasil. Cotinga 40: 23–30.

Cracraft J (1985) Historical biogeography and patterns of differentiation within the South American avifauna: areas of endemism. Ornithological Monographs: 49–84. https://doi.org/10.2307/40168278

Debinski DM, Holt RD (2000) A survey and overview of habitat fragmentation experiments. Conservation Biology 14: 342–355. https://doi.org/10.1046/j.1523-1739.2000.98081.x

Develey PF, Stouffer PC (2008) Effects of roads on movements by understory birds in mixed-species flocks in central amazonian Brazil. Conservation Biology 15: 1416–1422. https://doi.org/10.1111/J.1523-1739.2001.00170.X

Erize F, Mata JRR, Rumboll M (2006) Birds of South América: nonpasserines: rheas to woodpeckers. Princeton University Press, Princeton, USA, 384 pp.

Fahrig L (2003) Effects of habitat fragmentation on biodiversity. Annual Review of Ecology, Evolution, and Systematics 34 (1): 487–515. https://doi.org/10.1146/annurev.ecolsys.34.011802.132419

França DPF, Lima E, Freitas MA (2011) Listagem preliminar das aves de bordas de mata e áreas degradadas da Floresta Nacional do Jamari, Itapoã do Oeste, Rondônia, Brasil. Atualidades Ornitológicas: 51–56.

Fischer J, Lindenmayer DB (2007) Landscape modification and habitats fragmentation: a synthesis. Global Ecology and Biogeography 16: 265–280. https://doi.org/10.1111/j.1466-8238.2007.00287.x

Guilherme E, Marques EL, Santos GS (2018) Avifauna of a white-sand vegetation enclave in north-west Rondônia, Brazil: Relevant records, body mass and morphometrics. Bulletin of the British Ornithologists' Club 138: 286–306. https://doi.org/10.25226/bboc.v138i4.2018.a2

Guilherme E (2016) Aves do Acre. Edufac, Rio Branco, Brazil, 897 pp.

Guilherme E (2013) A range extension for Várzea Thrush *Turdus sanchezorum* in south-west Amazonia. Bulletin of the British Ornithologists' Club 133 (3): 249–251.

Guilherme E, Cintra R (2001) Effects of intensity and age of selective logging and tree girdling on an understory bird community composition in Central Amazonia, Brazil. Ecotropica 7: 77–92.

ICMBio (2018a) Plano de manejo da Estação Ecológica de Cuniã. ICMBio, Brasilia, 81 pp. https://www.icmbio.gov.br/portal/images/stories/plano-de-manejo/plano_de_manejo_da_resex_lago_do_cunia_2018.pdf. Accessed on: 2021-1-6.

ICMBio (2018b) Plano de Manejo da Resex Lago do Cuniã. ICMBio, Brasilia 87 pp. https://www.icmbio.gov.br/portal/images/stories/plano-de-manejo/plano_de_menejo_esec_de_cunia_2018.pdf. Accessed on: 2020-7-6.

IUCN (2020) The IUCN Red List of Threatened Species. Version 2020-3. https://www.iucnredlist.org. Accessed on: 2021-2-4.

Joseph L (2002) Geographical variation, taxonomy and distribution of some Amazonian *Pyrrhura* parakeets. Ornitología Neotropical 13: 337–363.

Kottek M, Grieser J, Beck C, Rudolf B, Rubel F (2006) World map of Köppen-Geiger Climate classification updated. Meteorologische Zeitschrift 15: 259–263. https://doi.org/10.1127/0941-2948/2006/0130

Laranjeiras TO (2013) WA1003484, *Pyrrhura lucianii* (Deville, 1851). WikiAves—a enciclopédia das aves do Brasil. http://www.wikiaves.com/1003484. Accessed on: 2020-7-6.

Lees AC, Peres CA (2008) Conservation value of remnant riparian forest corridors of varying qualityfor Amazonian birds and mammals. Conservation Biology 22: 439–449. https://doi.org/10.1111/j.1523-1739.2007.00870.x

Lopes EV (2014) WA1923271, *Pyrrhura lucianii* (Deville, 1851)]. WikiAves—a enciclopédia das aves do Brasil. http://www.wikiaves.com/1923271. Accessed on: 2020-7-6.

De Luca AC, Develey PF, Bencke GA, Goerck JM (2009) Áreas importantes para a conservação das aves no Brasil. Parte II – Amazônia,

Cerrado e Pantanal.SAVE Brasil, São Paulo, 361 pp.

Magnusson WE, Lima AP, Luizão R, Luizão F, Costa FRC, Castilho CV de, Kinupp VF (2005) RAPELD: a modification of the Gentry method for biodiversity surveys in long-term ecological research sites. Biota Neotropica 5: 21–26. https://doi.org/10.1590/S1676-06032005000300002

Margulis S (2003) Causes of deforestation of the Brazilian Amazon. Journal of Vegetation Science 13: 439–450. https://doi.org/10.1596/0-8213-5691-7

Marini MA, Garcia FI (2005) Bird conservation in Brazil. Conservation Biology 19: 665–671. https://doi.org/10.1111/j.1523-1739.2005.00706.x

Marques OU (2016) WA2148236, *Pyrrhura lucianii* (Deville, 1851). WikiAves—a enciclopédia das aves do Brasil. http://www.wikiaves.com/2148236. Accessed on: 2020-7-6

Mayhew RJ, Tobias JA, Bunnefeld L, Dent, DH (2019) Connectivity with primary forest determines the value of secondary tropical forests for bird conservation. Biotropica: 1–15. https://doi.org/10.1111/btp.12629

Menger JDS (2011) Fatores determinantes da distribuição de aves no interflúvio Purus-Madeira. Master's thesis, Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil, 46 pp.

Menger JDS, Magnusson WE, Anderson M J, Schlegel M, Pe'er G, Henle K (2017) Environmental characteristics drive variation in Amazonian understorey bird assemblages. PloS ONE 12 (2): e0171540. https://doi.org/10.1371/journal.pone.0171540

Olmos F, Silveira LF, Benedicto GA (2011) A contribution to the ornithology of Rondônia, southwest of the Brazilian Amazon. Revista Brasileira de Ornitologia 19: 200–229.

O'Neill JP, Lane DF, Naka LN (2011) A cryptic new species of thrush (Turdidae: *Turdus*) from western Amazonia. The Condor 113 (4): 869-880. https://doi.org/10.1525/cond.2011.100244

Pansini S, Sampaio AF, Reis NFC, Bernardi JVE, Quesada CAN, Andrade RTG, Manzatto AG (2016) Riqueza e seletividade de palmeiras ao longo de gradientes ambientais na região do interflúvio Purus-Madeira em porto velho, RO. Biota Amazônia 6: 93–100. https://doi.org/10.18561/2179-5746/biotaamazonia.v6n2p93-100

Pelzeln A von (1871) Zur Ornithologie brasiliens: Resultate von Johann Natterers Reisen in den Jahren 1987 bis 1835. A. Pichler's Witwe & Sohn, Wien, 560 pp. https://doi.org/10.5962/bhl.title.3654

Pereira RC, Roque FO, Constantino; PAL, Sabino J, Uehara-Prado M (2013) Monitoramento in situ da biodiversidade. ICMBio, Brasília, Brazil, 61 pp.

Peres CA (2001) Synergistic effects of subsistence hunting and habitat fragmentation on amazonian forest vertebrates. Conservation Biology 15: 1490–1505. https://doi.org/10.1046/j.1523-1739.2001.01089.x

Piacentini VQ, Aleixo A, Agne CE, Maurício GN, Pacheco JF, Bravo GA, Brito GRR, Naka LN, Olmos F, Posso S, Silveira LF,. Betini GS, Carrano E,Franz I, Lees AC, Lima LM, Pioli D, Schunck F, Amaral FR, Bencke GA, Cohn-H M, Figueredo LFA, Straube FC, Cesari S EC (2015) Annotated checklist of the birds of Brazil by the Brazilian Ornithological Records Committee / Lista comentada das aves do Brasil pelo Comitê Brasileiro de Registros Ornitológicos. Revista Brasileira de Ornitologia 23: 91–298. https://doi.org/10.1007/BF03544294

PPBio (2005) Gestão integrada Cuniã. https://ppbio.inpa.gov.br/sitios/cunia/gestaointegrada. Accessed on: 2020-8-20.

Quesada CA, Lloyd J, Anderson LO, Fyllas NM, Schwarz M, Czimczik CI (2011) Soils of Amazonia with particular reference to the RAINFOR sites. Biogeosciences 8: 1415–1440. https://doi.org/10.5194/bg-8-1415-2011

Ridgely RS, Tudor G (1994) The birds of South America: vol. II. The suboscine passerines. University of Texas Press, Austin, USA, 940 pp.

Rutt CL, Jirinec V, Johnson EI, Cohn-Haft M, Vargas CF, Stouffer PC (2017) Twenty years later: an update to the birds of the biological dynamics of forest fragments project, Amazonas, Brazil. Revista Brasileira de Ornitologia 25: 277–296. https://doi.org/10.1007/bf03544408

Rodrigues EB, Aleixo A, Whittaker A, Naka LN (2013) Molecular systematics and taxonomic revision of the Lineated Woodcreeper complex (*Lepidocolaptes albolineatus*: Dendrocolaptidae), with description of a new species from southwestern Amazonia. In: Engstrom RT (Ed.) Handbook of the birds of the world. Special volume: new species and global index. Lynx Edicions, Barcelona, Spain, 240–244.

Rylands AB, Pinto LPDS (1998) Conservação da Biodiversidade na Amazônia Brasileira : uma Análise do Sistema. Fundação Brasileira para o Desenvolvimento Sustentável, Rio de Janeiro, Brazil, 64 pp. http://www.fbds.org.br/IMG/pdf/doc-48.pdf. Accessed on: 2021-2-9.

Santos MPD, Silva GC, Reis AL (2011) Birds of the Igarapé Lourdes indigenous territory, Jí-paraná, Rondônia, Brazil. Revista Brasileira de Ornitologia 19: 229–243.

Schulenberg TS, Stotz DF, Lane DF, O'Neill JP, Parker TA (2007) Birds of Peru. Princeton University Press, Princeton, USA, 644 pp.

Sick H (1997) Ornitologia brasileira. Nova Front, Rio de Janeiro, Brazil, 912 pp.

Silva JMC, Rylands AB, Fonseca GAB (2005) O destino das áreas de endemismo da Amazônia. Revista Megadiversidade 1: 124–131.

Somenzari M, Amaral PP, Cueto VR, Guaraldo AC, Jahn AE, Lima DM, Lima PC, Lugarini C, Machado CG, Martinez J, do Nascimento JLX, Pacheco JF, Paludo D, Prestes NP, Serafini PP, Silveira LF, Sousa AEBA, Sousa NA, Souza MA, Telino-Júnior WR, Whitney BM (2018) An overview of migratory birds in Brazil. Papeis Avulsos de Zoologia 58: e20185803. https://doi.org/10.11606/1807-0205/2018.58.03

Sousa TS, Toledo GN, Lima MM de, Machado TL da S (2019) Avifauna do Instituto Federal de Rondônia – IFRO, Campus Ariquemes. Atualidades Ornitológicas: 33–41.

Souza JRD, de Andrade Plácido RA, Guilherme E, Melo TN (2018) First record of the *Pyrrhura lucianii* Deville, 1851 (Psittaciformes, Psittacidae) in Acre, Brazil, with notes on the consumption of salt. Check List 14: 285–289. https://doi.org/10.15560/14.2.285

Stotz DF, Lanyon SM, Schulenberg TS, Willard DE, Peterson AT, Fitzpatrick JW (1997) An avifaunal survey of two tropical forest localities on the middle Rio Jiparaná, Rondônia, Brazil. Ornithological Monographs 48: 763–781. https://doi.org/10.2307/40157566

Thiollay J (1992) Influence of selective logging on bird species diversity in a Guianan rain forest. Conservation Biology 6: 47–63. https://doi.org/10.1046/j.1523-1739.1992.610047.x

Valente RM, Silva JMC, Straube FC, Nascimento JLX (2011) Conservação de aves migratórias neárticas no Brasil. Conservação Internacional, Belém, Brazil, 400 pp.

Wilson MF (1974) Avian community organization and habitat structure. Ecology 55 (5): 1017–1029. https://doi.org/10.2307/1940352

WikiAves (2020) Aves do Brasil. https://www.wikiaves.com.br/index.php. Acessed on: 2020-8-1.

Whitney BM, Piacentini VDQ, Schunck F, Aleixo A, Souza B R S, Silveira LF, Rêgo MA (2013) A name for Striolated Puffbird west of the Rio Madeira with revision of the *Nystalus striolatus* (Aves: Bucconidae). In: Engtrom RT(Ed.) Handbook of the birds of the world. Special volume: new species and global index. Lynx Edicions, Barcelona, Spain, 240–244.